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MESSAGE

OF

Hon. George B. McClellan

THE MAYOR

TO THE

BOARD OF ALDERMEN

PURSUANT TO SECTION 115
OF THE
GREATER NEW YORK CHARTER

New York, January 4, 1909

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NEW MUNICIPAL BUILDING

As it will appear from Broadway and Park Place.

McKim, Mead & White, Architects.

MESSAGE

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PURSUANT TO SECTION 115
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GREATER NEW YORK CHARTER

New York, January 4, 1909

MARTIN B. BROWN
PRESS
49-57
PARK
PLACE
NEW YORK

NEW YORK, January 4, 1909.

To the Honorable the Board of Aldermen
of The City of New York:

GENTLEMEN—In compliance with the requirements of the Charter, I have the honor to transmit to you a general statement of the finances of the City which has been furnished to me by the Comptroller:

Debt Statement as of January 1, 1909.

The City Debt.

Funded Debt (Including Special Revenue Bonds).

	December 31, 1906.	December 31, 1907.	December 31, 1908.
Gross Funded Debt	*$665,697,392 06	†$735,014,965 05	‡$808,433,984 09
Less amount thereof held by the Commissioners of the Sinking Fund	*191,044,186 94	†197,437,164 02	‡210,421,340 02
Net Funded Debt	$474,653,205 12	$537,577,801 03	$598,012,644 07
		474,653,205 12	537,577,801 03
Increase in the year 1907 of Net Funded Debt		$62,924,595 91	
Increase in the year 1908 of Net Funded Debt			$60,434,843 04
Add increase in the year 1907 of Net Funded Debt			62,924,595 91
Total increase in the years 1907 and 1908 of Net Funded Debt			$123,359,438 95

* Includes $40,750,000 of General Fund Bonds, issued pursuant to Chapter 103 of the Laws of 1903.

† Includes $54,250,000 of General Fund Bonds, issued pursuant to Chapter 103 of the Laws of 1903.

‡ Includes $68,750,000 of General Fund Bonds, issued pursuant to Chapter 103 of the Laws of 1903.

Temporary Debt.

	December 31, 1906.	December 31, 1907.	December 31, 1908.
Revenue Bonds Issued in Anticipation of Taxes.			
Amounts Outstanding—			
Revenue Bonds of 1902	$3,130,000 00	$100,000 00	.....
Revenue Bonds of 1903	7,800,000 00	5,000,000 00	10,000 00
Revenue Bonds of 1904	9,225,000 00	1,000,000 00	2,570,000 00
Revenue Bonds of 1905	10,150,000 00	7,000,000 00	7,400,000 00
Revenue Bonds of 1906	20,107,270 00	9,397,210 00	9,160,000 00
Revenue Bonds of 1907	.....	31,148,826 92	13,625,000 00
Revenue Bonds of 1908	.....	.....	41,241,600 00
	$50,412,270 00	$53,646,036 92	$74,006,600 00
		50,412,270 00	53,646,036 92
Increase in the year 1907 in Temporary Debt		$3,233,766 92	
Increase in the year 1908 in Temporary Debt			$20,360,563 08
Add increase in the year 1907 in Temporary Debt			3,233,766 92
Total increase in the years 1907 and 1908 in Temporary Debt			$23,594,330 00

Summary.

Increase in the year 1907 in Net Funded Debt	$62,924,595 91	
Increase in the year 1907 in Temporary Debt	3,233,766 92	
Total increase in the year 1907 in Net Bonded Debt		$66,158,362 83
Increase in the year 1908 in Net Funded Debt	$60,434,843 04	
Increase in the year 1908 in Temporary Debt	20,360,563 08	
Total increase in the year 1908 in Net Bonded Debt		$80,795,406 12
Total increase for the years 1907 and 1908 in Net Funded Debt	$123,359,438 95	
Total increase for the years 1907 and 1908 in Temporary Debt	23,594,330 00	
Total increase for the years 1907 and 1908 in Net Bonded Debt		$146,953,768 95

The foregoing statement displays the debt of the City so far as its funded and temporary debts are concerned.

To ascertain the borrowing capacity or margin for incurring further indebtedness we must take into consideration an item not shown in the foregoing statement. That item consists of obligations incurred by the City in connection with contracts entered into: the liability accruing for lands acquired in condemnation proceedings and not paid for, and the liability of the City on account of judgments in litigations not yet liquidated.

The condition of the City's finances in relation to its borrowing capacity or margin for incurring further indebtedness on October 1, 1908, was as follows:

Ten (10) per cent. of the Assessed Valuation of Taxable Real Estate for 1908.			$672,241,578 90
Net Funded Debt (chargeable against Constitutional Limitation)	$543,869,679 09		
Net Contract Liability (chargeable against Constitutional Limitation)	45,487,533 22		
For Lands Acquired (Estimated) (chargeable against Constitutional Limitation)	18,935,961 76		
		$608,293,174 07	
Revenue Bonds of 1902 issued in 1905, outstanding October 1, 1908	$100,000 00		
Revenue Bonds of 1903 issued in 1905, outstanding October 1, 1908	5,000,000 00		
Revenue Bonds of 1904 issued in 1905 and 1907, outstanding October 1, 1908	3,249,000 00		
Revenue Bonds of 1905 issued in 1907, outstanding October 1, 1908	7,000,000 00		
Revenue Bonds of 1906 issued in 1907, outstanding October 1, 1908	9,376,210 00		
		24,725,210 00	
			633,018,384 07
			$39,223,194 83
There remains at October 1, 1908, of the Proceeds of the Sale of Bonds, the following amount, which has not been apportioned and transferred to the credit of the various Accounts on account of which said Bonds were authorized to be sold			5,110,361 28
Estimated Margin at October 1, 1908			$44,333,556 11

There are three subjects now uppermost in the public mind, concerning which I have addressed you in previous messages. They are:

Uncollected taxes,

The City debt,

City expenditures.

Uncollected Taxes.

In my message of January, 1905, I pointed out the danger to the City's finances and credit of making inadequate provision for uncollectible taxes, and presented an estimate of the arrears for which no provision had been made, amounting at that time to over thirty million dollars. I appointed a Commission to consider this subject and to suggest methods of more prompt collection.

As a result of the work of that Commission, provision has been made for funding the uncollectible arrears then existing and for adequate provision for subsequent uncollectible arrears. The Commission also recommended and the Legislature enacted a law for the prompt collection of real estate taxes.

Debt.

During the last five years the borrowing power of the City has increased one hundred and ninety-seven millions, or a little more than thirty-nine millions a year on the average. In my message of 1905 I stated that debt for ordinary purposes should not be incurred to the extent of more than thirty to thirty-five millions annually. I have caused to be prepared a statement of the corporate stock issued since January 1, 1904, showing the amount issued for purposes to which the City was committed prior to that date, and the amounts issued for purposes authorized subsequent to that date. The statement is printed as an appendix to this message.

The total issue of corporate stock has been $298,945,094, and of this amount the sum of $151,330,602 was issued for purposes to which

the City was committed prior to 1904. The remainder, $146,935,186, was issued for purposes authorized since 1903, and averages somewhat less than thirty millions a year.

The main items of the total issue are as follows:

Water	$39,625,098
Rapid Transit	19,440,825
Schools	55,638,230
Public Buildings	27,312,420
Bridges	40,950,183
Public Works (Streets and Roads)	47,995,936
Docks and Ferries	41,404,422
All other purposes	26,577,980
Total	$298,945,094

The same items of the issues for purposes authorized since January 1, 1904, are as follows:

Water	$21,269,636	14.5 %
Rapid Transit	3,389,602	2.32%
Schools	38,787,300	26.4 %
Public Buildings	8,546,668	05.83%
Bridges	514,372	00.35%
Public Works (Streets and Roads)	22,233,398	15.1 %
Docks and Ferries	35,789,732	24.3 %
All other purposes	16,404,478	11.2 %
Total	$146,935,186	100 %

More than one-quarter of this entire debt has been incurred for schools, in the effort to keep pace with the ever-increasing number of children demanding education. Nearly another quarter has been spent for docks and ferries, an expense in large part forced upon the City.

More than eleven million dollars have been spent in the last five years on the Chelsea improvement alone, $4,333,219.93 having been devoted to the acquisition of property.

The water supply was necessary to the very existence of the City, and the great expense for repaving was urgently demanded for comfort and convenience, besides being essential for the preservation of proper sanitary conditions. These four items account for over 80 per cent. of the corporate stock issued for purposes authorized since January 1, 1904.

Budget Expenditures.

The population has increased 17.2 per cent. in five years, and besides the increase of population, the increase in the prices of commodities and the general cost of living must be taken into account in any consideration of the increase in current expenses. This increase may conservatively be stated as 15 per cent., so that 32 per cent. is the least increase which might be expected in the cost of supplies and salaries not fixed by law, without making allowance for other important causes which have affected the City's expenditures.

In order that the Budget increase may be studied and easily comprehended, I have caused to be prepared a statement showing the appropriations for 1904 and 1909, together with the increase for each item and the percentage which the increase in each separate appropriation is of the total increase in the Budget for 1909 over the Budget for 1904. This statement appears in the appendix previously referred to.

The City Budget for 1909, exclusive of the County Budgets and the item for deficiency in the collection of taxes exceeds the City Budget for 1904 by $45,483,644. This is a great sum, and if there were reason to believe that the expenditures of the City must continue to increase at the same rate there might be cause for alarm. There is, however, no ground for such fear, if the same care continues to be exercised in estimating City expenses and preparing the Budget.

The first nine items on the statement account for 80 per cent. of the increase, and the first item accounts for 38½ per cent. This first item is the payment on account of principal and interest of the City debt. As appears from the statement of the issues of corporate stock, vast undertakings were in progress five years ago, for which over one hundred and fifty-one millions of corporate stock have been issued.

The last five years has been a period of development and expansion rendered necessary by the expansion of the territory of the old City of New York from sixty-two square miles to three hundred and twenty-seven, and the extension of City methods and conveniences over a large part of this vast area. What has been done and what it cost more fully appear in the description of the work of the various City departments.

While the increase in expenditure has been very great, the growth in the actual value of real estate, together with certain changes in financial methods, have reduced the average tax burden on the true value of property below what it was before or immediately after consolidation.

It is easily demonstrated that Brooklyn, Queens and Richmond do not pay anything like the money spent upon them, and partly because of this fact the total taxes levied in Richmond in 1908 were $59,078 less than the total taxes levied in 1901. In many of the old parts of Brooklyn, where real estate has not been much improved, and values have not greatly increased, the taxes levied in 1908 were less than in 1897. For example, in all or parts of Wards 1 to 12, also 20, 21 and 23, the aggregate taxes in 1897 were $4,280,364, and in 1908 $3,909,049, so that the aggregate taxes paid in 1908 were less by $371,314 than the taxes on the same property in 1897, in spite of new buildings on which the tax was $220,242, which is included in the total for 1908.

Even in Manhattan, where values have risen enormously, there are some blocks, as, for example, blocks 478, 480, 497, 499, 500 and 514, in the neighborhood of Broadway and Spring Street, where the aggregate tax levied on real estate in 1908 is less than the tax for 1899, by the sum of $39,779, in spite of the new buildings erected.

In considering taxes levied, the impulse is to regard merely the totals. This gives a mistaken and misleading impression. The tax rate is always a percentage on assessed value, and if the base on which the tax is levied increases enormously, the total of taxes ought to rise. This is the case in The City of New York. Land values have increased tremendously to the enrichment of the owners, and the tax has not increased proportionately.

The first nine items of the Budget with the increase of 1909 over 1904, which account for 80 per cent. of the total increase, are as follows:

BUDGET INCREASE 1909 OVER 1904.

	Increase 1909 over 1904.	Percent. of Total Inc. of Budget of 1909 over 1904.
Debt service (principal, interest and installments)	$17,511,788	38.501
Department of Education	6,557,719	14.417
Police Department	2,156,401	4.740
Fire Department	2,071,265	4.553
Department of Street Cleaning	1,970,587	4.332
Charitable Institutions	1,914,401	4.209
Department of Water Supply, Gas and Electricity	1,711,291	3.762
Department of Health	1,375,467	3.024
Department of Parks	1,319,731	2.910

These departments have to do with the care of life, health, education and property. The difficulty and cost of this duty is immensely affected by the fact that New York is the great port of entry for immigrants, and during the last four years and five months over 3,700,000 immigrants landed at this port. Many of them became residents of New York, more of them stayed here temporarily, and still others passed through.

We have a great duty thrust upon us to the strangers who come to us and to their children. If we fail to perform it, we shall surely suffer from disease and the demoralization of our institutions.

There are always some who urge upon us an increase in every appropriation planned, but generally they wish this increase at the expense of some other equally important activity. The Board of Estimate and Apportionment, and even the Legislature, have been besieged on behalf of every one of these eight departmnts. In the interest of a proper balance in City expenditures, it has even been necessary for me to veto bills granting to one department or another an excessive advance. The Department of Education represents 14½ per cent. of the total Budget increase, and this has been due to the maintenance of the new schools, costing over fifty millions of dollars, the pay of the new teachers, the automatic increase in the salaries of old teachers, the extension of playgrounds, recreation centres and the proper provision for the care of the children.

The increase in the appropriation for the police has only about kept pace with the population, and the appropriation has been less than has been strongly urged upon us by the Commissioner.

The increase for the Fire Department has been chiefly due to the extension of the paid department to the rural sections of the City, formerly served by volunteers.

Our people are no longer satisfied with the old methods of street cleaning, and the number of miles of streets cleaned has increased from 971 to 1,216.

The Department of Charities has broadened its activities, and the increase in the population brings a greater burden than the mere figures indicate.

The Department of Water Supply, Gas and Electricity has practically relighted the City in the last five years, has greatly extended the water supply, and the revenue of the Department was $2,000,000 more last year than in 1903, a much greater increase of revenue than the increase in the expenditure. The daily supply of water in Manhattan and The Bronx was 40,000,000 gallons more than in 1903, and in Brooklyn 45,000,000.

The Health Department has not only cost a great deal of money, but it has imposed additional expense on the Board of Education by greatly increasing the school attendance through improving the health of the children and keeping them alive. The growth of population inevitably increases the expenses of the Health Department in increasing ratio. But no one can object when money so spent produces the remarkable decrease in the death rate, more fully explained in the description of the activities of the department.

The acquisition of new parks brings with it an increase in the expenses of the Park Department, which is now caring for 277 additional acres of parks, and 9,860 additional feet of parkway. The employees are now paid out of the Budget allowances instead of from corporate stock, as was previously done on the theory that their work was a permanent betterment; a theory which is manifestly absurd.

The increase for the appropriation of the City Record has been partly to make up the deficiency which existed in 1904. For hospitals and correction the increase is due to the increase of population. The volume of litigation has required a large increase in the appropriation for the Law Department. The new bridges have made necessary a largely increased expenditure by the Department of Bridges. In regard to appropriations for the Tenement House Department, we

have been urged on the one hand to increase the appropriations because the force was inadequate, and on the other, we have been urged to decrease the appropriations on the ground that the Department was too active. The increase in the appropriation has been substantial and the efficiency of the Department has kept pace with the increase in the appropriation. The Department of Taxes and Assessments has only received sufficient appropriation to keep pace with the growth of population. The Commissioners of Accounts have needed more money for the extensive investigations that have been instituted. The Board of Elections has had imposed upon it new duties by the election law, and the double primary of last year imposed a heavy expense. The Budget for the mayoralty has been increased by the transfer of the salaries of some thirty police in the Bureau of Licenses to the payroll of the Executive Department. The Civil Service Commissioners have had an extraordinary number of examinations, due to the creation of the Board of Water Supply, besides the natural increase of 10 per cent. a year in the number of applications for examination. The work of the Board of Assessors has been increased by the opening of new streets and other local improvements. The office of the Commissioner of Licenses was organized in 1904, hence the entire expense appears as an increased appropriation.

TAXES AND ASSESSMENTS.

In 1904 the appropriation for the expenses of the Department of Taxes and Assessments equalled $69.77 per million dollars of the assessed value of real estate. In 1908 the appropriation equals $67.71 per million, a decrease of $2.06 since 1904. The assessed value of real estate has increased 34 per cent., the number of employees in the Department has increased 39 per cent., and the number of assessment districts has increased 46 per cent., while the appropriation has increased only 30 per cent.

The law requiring the separate statement of the value of land in the assessment of real estate was drafted by the present President of the Tax Department, and in the first year of my administration the value of land was for the first time stated separately on the record of the assessed valuation. Through this public exhibition of the details of the assessment the taxpayers have become better acquainted with the system long in use of assessing real estate by the use of unit values for land and square foot factors for buildings. Deputy Tax Commissioners are more accurate in their work because they know that it can be analyzed and carelessness will be apparent, and unfair assessments are more easily discovered and corrected. When taxpayers appreciate that the assessment of real estate is methodical and scientific are more readily satisfied with the judgment of the Department.

The improvements in the Department during the last few years would have been absolutely impossible without an increase in the force. In 1904 each deputy in Brooklyn, on the average, had to assess over 16,400 separate parcels of real estate, and each deputy in Queens had to assess over sixteen square miles of territory; in the other Boroughs the districts were also too large. It was physically impossible to do the work as it should be done. Now there are nineteen assessment districts in Brooklyn, instead of twelve, and fourteen in Queens, instead of eight.

In 1907 the Tax Department secured an amendment to the Charter by which the duty of apportioning the assessment of divided parcels of real estate was transferred from the Finance Department to the Tax Department, and apportionment at any period of the year was made lawful. Under the old law no apportionment was possible until taxes were due and persons were compelled to wait for their bills, sometimes for months, and obliged to pay penalties and interest. Under the new law taxpayers this year were able to obtain bills as soon as the tax was payable on 9,712 parcels assessed for over ninety-four millions of dollars.

A card index of all exempt real estate, consisting of over ten thousand parcels, has been prepared, and this for the first time presents all City property classified according to its use.

In the assessment of personal property persistent efforts have been made to eliminate from the assessment rolls the names of persons and corporations not properly liable to personal assessments by the inspection of court and bankruptcy proceedings, by the co-operation of the attorney for the collection of arrears of personal taxes, and many millions of dollars of unproductive assessments have been stricken from the rolls. At the same time the greatest care is exercised to assess all persons who may be liable, and to this end the records of the Surrogates' Courts in numerous counties of New York and New Jersey are annually examined, and all other sources of information are fully utilized.

The forms on which corporations apply for the reduction of personal assessments have been revised so as to present with the utmost clearness the details of assets and deductions. The methods of assessing personal property of corporations have been changed, with the result that the tentative assessment has been decreased from the absurb figure of one billion, four hundred million dollars to about ten per cent. of this amount, and the final assessment has been increased. By fair and careful methods *certiorari* proceedings for the correction of personal assessments have steadily decreased until for last year only five such proceedings have been instituted.

In the last two years seven different bills, prepared by the Tax Department, amending the Charter or the Tax Law, have been enacted. These measures have improved and simplified procedure, saved trouble and annoyance to taxpayers, saved expense to the City, and in one case, that of the repeal of the undesigned exemption of the shares of banks held by trust companies, has saved the City many thousands of dollars a year.

The Tax Commissioners have been as vigilant to protect individual citizens as to conserve the rights of the City. The duties of Tax Commissioners are judicial and this fact has been consistently impressed upon the public. Citizens do not regard Tax Commissioners as prosecutors but as impartial judges.

The reports of the Department are regarded as works of such value to economists and administrators that they are in demand in all parts of this country and in Europe. The methods of assessing real estate, and of presenting the results have been so clearly set forth that the City of New York has taken its proper place as an example for the whole country to imitate.

HALF A MILLION DOLLARS SAVED BY ABOLISHING REBATES.

Upon the suggestion of the Department of Finance and the Tax Department the Charter was amended in 1908 so as to do away with rebates for the prompt payment of taxes. Those who obtained the advantage of rebates were chiefly the largest taxpayers and the expense fell on all taxpayers.

Owing to the change in the law the amount collected in October and November, 1908, exceeded the sum collected for the tax of 1907 from October to April 1, 1908.

The collections during October and November, 1908, amounted to $83,180,968.67, as against the collections during October and November, 1907, of $66,205,131.49.

The rebate allowed on the October payments of the tax of 1907 and 1906 was:

Tax of 1907	$489,840.15
Tax of 1906	526,353.39

Owing to the abolition of the rebate the volume of work in 1908 decreased materially from prior years. The payments came in gradually, increasing in amount daily, until they reached the maximum at the end of October.

The temporary clerks assigned to the Receiver's Bureau became proficient in their duties before the work gained in volume, as the Bureau was enabled to assign the best of them to the most important work, thereby avoiding the errors, caused in prior years, by being compelled to assign, on the day of their appointment, inexperienced clerks in the preparation of tax bills and the entering of payments on the cash books at a time when the volume of work was at its maximum.

This simple amendment has saved nearly half a million dollars and rendered possible the prevention of irritating and costly clerical errors. The results are most gratifying and reflect great credit on those who conceived it and secured its enactment.

WORK OF THE ADVISORY COMMISSION ON TAXATION AND FINANCE.

In accordance with the policy announced in my message to the Board of Aldermen on January 2, 1905, I appointed in February of that year a Commission to consider certain defects in the financial methods of the City and to recommend remedies. This Commission has recently made its final report to the effect that it has considered all the subjects submitted to it, and has recommended bills which have been enacted.

My message to the Board of Aldermen on January 6, 1908, described at some length the subjects considered by the Commission up to that time, and their relation to the financial system of the City. A brief summary of the Commission's work is here presented:

The deficiency due to uncollectible taxes in excess of all provisions theretofore made was provided for by the authorization of an

issue of corporate stock. Annual deficiencies thereafter arising were provided for by requiring the Board of Estimate and Apportionment to insert in the Budget annually an amount sufficient to cover such deficiency.

The Constitutional limit of indebtedness was considered by the Commission and an amendment to the Constitution suggested. The amendment adopted by the Legislature of 1908 was based upon the report of the Commission.

In December, 1907, a report was presented by the Commission on the collection of arrears of real estate taxes and assessments. This report reviewed the existing method of enforcing the payment of arrears of real estate taxes, assessments and water rents, and found that these methods were wholly inadequate to enforce the rights of the City. Accordingly the Commission reported a bill to amend the Greater New York Charter relative to sales of lands for taxes, assessments and water rents, which was enacted by the Legislature of 1908, and went into effect on October 1, 1908.

By the provisions of this Act the old method of enforcing such charges by the sale of a lease was abolished and in its place is substituted a method requiring the sale of the lien of the City for the arrears of taxes, assessments and water rents, with interest, penalties and charges to the person who bids the lowest rate of interest for which he will advance the amount to the City. The lien to the City is to be transferred to the purchaser by an instrument to be known as a "transfer of tax lien," and which by the terms of the Act is assimilated as closely as possible to a mortgage on real estate. The delinquent taxpayer is allowed three years in which to pay off and discharge this transfer of tax lien, and in the event of his default the tax lien may be foreclosed in a Court of Record, by a procedure similar to the foreclosure of a mortgage. The substance of this change is the substitution of a judicial foreclosure whereby the rights of all parties in in-

terest are protected for the administrative act of the Collector of Assessments and Arrears in an *ex parte* proceeding.

The report of the Commission advising against a change in the time for the collection of taxes; the report on the constitutional limit of indebtedness, on the taxation of personal property, on City accounts, on the collection of taxes and on the deficiencies arising from uncollectible taxes, constitute a valuable study of the financial affairs of the City. The legislation enacted as a result of the work of the Commission is of great worth and far-reaching importance. The thanks of the City are due to these men who have given time and thought to the City's service without reward.

WATER SUPPLY.

High Pressure Fire Service.

The many large fires in November, 1903, followed by the disastrous conflagrations in Baltimore and Rochester, brought The City of New York face to face with a situation which had to be met without delay.

In spite of the efficiency of our Fire Department, and the excellence of the system under which it was being operated, our own large fires and those in other cities, showed plainly that in our congested districts, a fire unchecked for any length of time would result in a conflagration that would be nothing short of a national calamity.

After going fully into the subject we decided upon the installation of the high pressure, or as it is more popularly known the Salt Water Fire Service. I called for public hearings on the subject and in the end plans were prepared and have been carried out in Coney Island, Brooklyn and Manhattan.

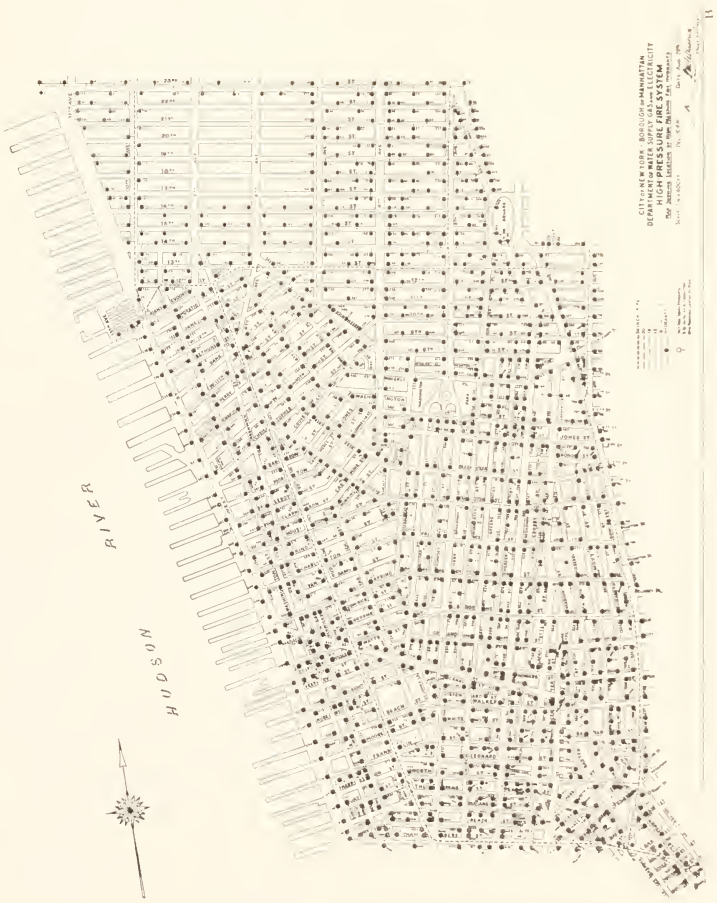
The utmost care was exercised in the preparation of the plans and specifications for this work, while the inspection at the foundries, at the shops and on the ground was thorough and efficient. At the

NEW HIGH-PRESSURE SYSTEM.

NEW HIGH-PRESSURE SYSTEM.

INTERIOR NEW HIGH-PRESSURE STATION, MANHATTAN.

HIGH-PRESSURE FIRE SERVICE STATION.



HIGH PRESSURE DISTRICT.

Each dot represents a high pressure hydrant.

same time the work was so actively and ably conducted, that the whole distribution system was completed in seventeen working months, or at the rate of 17,500 feet per month, or 700 feet per day, the daily rate sometimes reaching 1,400 feet, a time record hitherto unequaled in this kind of work. It is all the more remarkable considering the exacting requirements of the specifications and the well-nigh indescribable difficulties under which the work was conducted.

As a result, we have now completely installed, thoroughly tried and tested, both during construction and after completion, and in actual and most successful operation since July 6, a high pressure fire system provided with all the safeguards that modern engineering science can devise, and the skill of mechanics carry out, to secure regular and continuous operation and meet all emergencies. It is capable of pumping at the rate of fifty million gallons of water in twenty-four hours, against a pressure of 350 pounds per square inch, and this enormous force, against which no imaginable conflagration could stand, can be concentrated at any point within the High Pressure Fire District, and made available within two minutes after the alarm of fire is given. It is consequently ready for operation long before the firemen can reach their posts and stretch their hose lines; while telephone signal boxes are so located that a fire at any point within the protected district can be readily observed and orders directly communicated therefrom, either to Fire Headquarters or to the pumping stations.

No other city in the world possesses a system of fire protection equalling ours in magnitude and efficiency, and it safeguards, among others, our dry goods district, with its enormous values, a bad fire in which has long been the dread of merchants and fire insurance companies, since such a conflagration would bankrupt every large fire insurance company doing business in the United States.

The system in Coney Island protects an area of about 146 acres, and has 8,500 feet of mains. The cost of installation was $100,000. The capacity of the station is 3,600 gallons per minute, which may be increased to 4,500 gallons per minute against a pressure of 150 pounds. Salt or fresh water may be used.

The pumping station is fitted with three triplex pumps, operated by gas engines. This system has been in successful operation for nearly two years and was for the first time severely tested in the Coney Island fire of last July. This fire had already destroyed many of the frame buildings, with which Coney Island is covered, and the whole island seemed doomed, when the high pressure fire system was brought into play and a line of hydrants, forming a compact water curtain at 150 pounds pressure, quickly arrested its progress.

The Brooklyn system protects the dry goods and high office building district, covering an area of about 1,400 acres. It has 123,000 feet of mains, 740 hydrants and two pumping stations. One of these stations has a capacity of 15,000 gallons per minute, consisting of three centrifugal pumps with a capacity of 5,000 gallons per minute each, against a pressure of 300 pounds. The other station has three similar pumps, so that its capacity is 9,000 gallons per minute, and the total capacity of the system is therefore 24,000 gallons per minute, against a pressure of 300 pounds.

At the main station either fresh or salt water can be used. The cost of the system was $1,400,000, and it is now complete. The pumps are electrically driven.

The Manhattan system comprises an area of about 1,456 acres, extending from Chambers street to Twenty-third street, and from the North River to Broadway, Fourth avenue and the Bowery. It has 297,000 feet, or fifty-six miles of mains, with 1,274 hydrants, 2,191 valves and 214 telephone fire alarms. It has two pumping stations, one at Gansevoort and West streets, and the other at Oliver and South

streets, so located therefore, that they can never be in the centre of a conflagration, but must be at either the beginning or the end of one. Provision has been made in both stations for the use of either Croton water or river water, in the latter case one station drawing from the North River and the other from the East River. Both stations are absolutely fireproof, and provided with exterior water curtains which not only afford additional protection, but serve to give the men operating the pumps a sense of security and comfort while doing their work, in case of a large fire in the adjoining buildings.

Each station is equipped with five pumps, electrically driven. Under actual test, each has pumped 3,600 gallons per minute against a pressure of 350 pounds, so that the total capacity of the two stations, under these conditions, is 36,000 gallons per minute, or in round figures, 52,000,000 gallons in twenty-four hours, while at lower pressures, which will be those more generally used, the capacity may be increased as much as 30 per cent.

The unqualified success of the Manhattan High Pressure Fire Service System, both in design, construction and operation, is now well established and recognized, not only by our Fire Department, but by the experts sent from other cities.

Notwithstanding its magnitude and difficulties, this work has been done with record speed and at a cost well within the estimates and appropriations granted for that purpose, while the total expenses of inspection, supervision, engineering, etc., have amounted to less than 5 per cent. of the cost of the work.

Plans have been prepared and the requisite appropriations obtained for extending the high pressure fire service in Coney Island, and also in the Borough of Manhattan, in the congested district from Houston to Chambers streets, and from the Bowery and Park Row to the East River, and the work will be actively prosecuted.

The almost immediate effect on insurance rates is one of the most gratifying results of the installation of the high pressure service. On December 9, last, the New York Fire Insurance Exchange ordered a general reduction of rates in the Manhattan high pressure zone. This reduction, I am reliably informed, will mean an immediate saving in premiums of $500,000 a year, and is to be followed shortly by another reduction.

Of the great reduction in Brooklyn, due to improved water supply, about $250,000 is directly due to the installation of the high pressure system, so that this great improvement has already earned at least three-quarters of a million dollars return, annually, to the taxpayers. The system is, therefore, not only to be regarded as a primal protection to life and property, but also one of the most productive investments of the City .

Croton Water Supply, Etc.

Apart from the Catskill water system, which is dealt with in another place, I wish to call the attention of your Honorable Board to what has been done in the development of the water resources at hand during the past five years.

The supply of water furnished from municipal works, which, in 1903 averaged 397,000,000 gallons daily, reached over 479,000,000 gallons daily in 1908, an increase of 82,000,000 gallons daily, of which 43,000,000 gallons are used in Manhattan and The Bronx, and 38,000,000 gallons in the Borough of Brooklyn. By the sale of this water, the City's revenues have been increased $2,000,000 annually.

In the Croton system, the storage capacity of the reservoirs, which in 1903 amounted to 46,000,000,000 gallons, has been increased to 88,000,000,000 gallons, and, with the completion of the Croton Falls Reservoir, 16,000,000,000 gallons additional will be secured.

In Brooklyn the development of the available watershed has been most successfully carried out, resulting in an addition to the supply

of about 75,000,000 gallons daily. In this connection, the extraordinary yield of the infiltration galleries at Wantagh and Massapequa, far exceeding the estimates, deserves particular notice. The increase available in the Borough of Brooklyn, since January 1, 1904, is equivalent to about 70 per cent. of the total amount supplied during 1903, while in regard to the quality of the water the improvement is still more marked.

In the Borough of Queens, improvements in the six Municipal pumping stations, including the reconstruction of Station No. 2, which was destroyed in 1902, and the utilization of the waters of Oakland Lake, by filtration, soon to be completed, have materially increased the supply from municipal sources. The greater part of the water supply in this Borough, however, is furnished by private companies, which sell directly to consumers and also to the City. The amount purchased by the City has increased from about 4,000,000 gallons daily, in 1903, to about 6,500,000 gallons daily in 1908.

In that Borough the areas available for further development of the supply, at a reasonable cost, are held by a private company. I deem the acquisition of this company advantageous, if the purchase can be made at a reasonable price. In this way the development of existing sources, and the extension of the distribution system can be carried out with the sole view of improving the public service. By this means we will also be enabled to discontinue the operation of some of the smaller Municipal plants in Queens, particularly those at Long Island City and Whitestone which, owing to their small yield, are run at a heavy expense.

In the Borough of Richmond the City owns only one Municipal plant, at Tottenville. It has acquired two private water companies, but is not yet operating them, owing to questions of title transfer.

In spite of all efforts to add to our water supply, it is evident that a shortage may be experienced before water from the Catskills is available, so that it is essential to husband our resources and check preventable waste. This can best be effected by metering the system. This question has received my careful attention, and in compliance with legislative enactment, a report has been prepared and presented to the Board of Estimate and Apportionment, for the installation of meters in typical districts, in order to acquire the necessary data to properly solve this important question and, at the same time, prevent the illegal use of water.

While an adequate supply is obviously all important, the distribution system affects the consumer directly, as he is dependent on its efficiency. Mains of insufficient capacity mean unsatisfactory and costly domestic service, and increased fire insurance rates, while, on the other hand, a properly designed distribution system means proper protection and quick development of property, with resultant improvement in public health and increase in values.

In no other respect has the improvement been so marked during the last five years. There have been laid, during that period (exclusive of the high pressure fire system), not less than 564 miles of mains in the five Boroughs, to which have been connected 12,000 hydrants. As an instance of the value of these mains, I refer briefly to their effect in the Borough of Brooklyn. In accordance with plans, prepared four years ago, 211 miles of new mains have been laid, and 47 miles of tubercolated pipe cleaned, in that Borough. This represents 30 per cent. of the total mileage of mains comprised within that system on January 1, 1904, and nearly three times the amount laid during the previous five years. Aside from the improvement in domestic service and the development of unsettled districts, the reduction in insurance rates already allowed, in the more important business sections of the City, has been $600,000 annually. This sum, capitalized

at 5 per cent., represents many times the cost of the water mains laid in the districts described.

The pumping stations in all five Boroughs have been materially improved and extended. The older ones have been remodeled, old boilers have been replaced, new engines have been installed, while at the Jerome Avenue Station, two new pumping units with a capacity of 25,000,000 gallons a day, are ready for installation by the Board of Water Supply, so that the City may, if required, dispense with the Kensico Reservoir, pending the construction of the new reservoir there. These pumps can be used either for the Williamsbridge Reservoir, or for the high service in The Bronx.

Provision has also been made in Brooklyn to increase the conduit capacity, the lack of which has, at times, prevented the delivery of an adequate supply to Brooklyn, even when available in the watershed, by laying a six-foot steel pipe from the Borough line to Massapequa, a distance of twenty-three miles. About nine miles of this pipe was placed under contract in the early part of 1908, and has been completed and put into use. The final contract for this line has been let and when completed, it will have a capacity of 50,000,000 gallons daily, or about 40 per cent. of the total capacity of all the other conduits.

The protection of the water supply from pollution has received careful attention. A most thorough and systematic inspection of the watersheds, especially that of the Croton, has been maintained during the past five years, and constant laboratory analyses and examinations have been made.

The most threatening danger of contamination has been for several years the discharge of the sewage from Mount Kisco, into one of the tributaries of the Croton. After several years of negotiations, an agreement has been made with the Village of Mount Kisco for the installation of sewers, already under construction, and a disposal plant

for the treatment of the sewage, which will effectually eliminate all danger from that source. The City has, furthermore, secured the installation at the Montefiore Home for Consumptives, of a disposal plant for the proper treatment of the sewage which, as previously discharged into a tributary stream of the Croton, was a dangerous source of pollution.

It must be added, however, that while these temporary expedients will be continued to the fullest extent of our resources, the danger from pollution increases yearly with the increase of population in the watershed, and can only be guarded against by the filtration of the Croton water.

In my last annual message I called the attention of your Honorable Board to the fact that the engineers of the Department, assisted by the most eminent experts in the United States, had made an exhaustive study of this question. Their conclusion was that the best place available was the east basin of the Jerome Park Reservoir, and accordingly all other construction work there was stopped. This has led to some criticism on the part of persons ignorant of the City's plans for this property. There has been some delay, caused by the preparation of plans for the work, and by the City's financial condition. The situation at present is that the Commissioner of Water Supply has made application for an appropriation of $4,000,000 for the masonry part of the filtration plant, including the basin for the treated water, that the Board of Estimate, following the usual custom, has referred the matter to the Department of Finance, and that that Department has not yet reported on it. The Water Department is prepared to start work as soon as the money is available.

Aqueduct Commission.

I have no reason to change my recommendation of last year that the Aqueduct Commission be abolished. What little work there re-

CROSS RIVER DAM, CROTON AQUEDUCT.

CROSS RIVER DAM, CROTON AQUEDUCT.

mains to be done can be done more effectively by either the Department of Water Supply, Gas and Electricity or the Board of Water Supply. In the hands of either of these departments a great financial saving can be accomplished.

Under the amended law which permits the Commission to exist until its work is completed, it is apparent that the members contemplate perpetual life. Although the new Croton Dam was completed in 1906, and the Cross River Dam was finished a year ago, neither has yet been turned over to the control of the water department, which is the proper superintendent of maintenance.

Plans for a new storage reservoir in the northeast corner of the Croton Watershed, at a cost of $3,500,000, have been prepared by the Commission without so much as consulting the Department of Water Supply, which is responsible for the supply, as to the necessity for it. Other expenditures are also in contemplation by the Commission, and it is impossible to escape the conviction that these works are planned for the purpose of keeping the Commission in existence.

If this bi-partisan Commission has the power, as it apparently has, to involve the City in unnecessary expenditures without consulting the local authorities, then it should be wiped out without delay. It is my purpose to again recommend such legislation at this session of the Legislature.

The Board of Water Supply.

Criticism of the work of obtaining an additional water supply in the Catskill Mountain shed should not be that it is extravagant and unnecessary, but that the City of New York should have begun the work long before it did. We should be actually getting water now from the Catskills or some equally good source. Our shortage to-day would be far more serious but for the plentiful rainfall of 1907.

The water shortage danger is an ever increasing one, not only because of the demands of a constantly increasing population, but because of the indications of a diminution in the abnormally abundant rainfall of recent years. On account of this situation the City is not only hastening the construction of the Catskill Aqueduct between Ashokan Reservoir and the Croton watershed, but is working on the temporary development of a supply from sources east of the Hudson River.

As early as 1899 the inadequacy of the City's water supply began to give concern. On several occasions the City was only saved from a serious shortage by a lucky rainfall. An attempt was made in this emergency to commit the City to a contract with the Ramapo Company, but so much opposition developed to this that it was abandoned. Investigation showed that the Croton supply would last, if properly husbanded, but that there was, nevertheless, urgent need of seeking sources of additional supply.

In December, 1902, the Burr-Hering-Freeman Commission was created "to make a thorough, complete, exhaustive examination and investigation of the City's need of water." Its work was limited strictly to sources lying within the State of New York. This Commission reported in November, 1903. The watersheds studied in detail were those of Fishkill Creek, Rocliff Jansen Kill and Wappinger Creek, east of the Hudson: Rondout, Esopus, Schoharie and Catskill Creeks, in the Catskill Mountains.

New York's population of 3,700,000 in 1903, was increasing at the rate of 33 per cent. per decade, so that by 1930 a population of 7,000,000 could be expected. Manhattan and The Bronx were drawing close to the limit of the Croton Shed, so that the works recommended for an additional supply from the north must have a capacity of from 500,000,000 to 750,000,000 gallons a day. The works

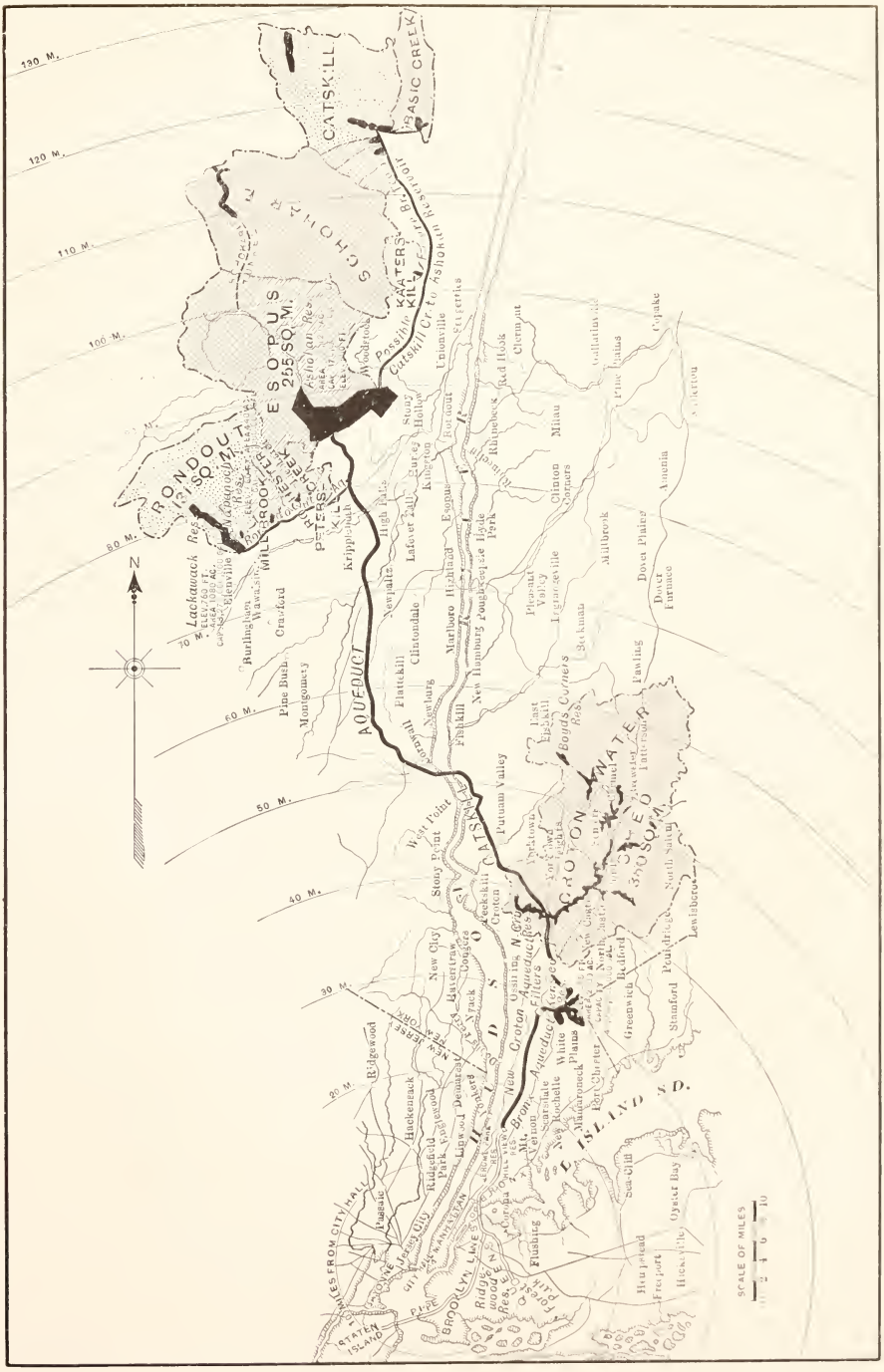
OLIVE BRIDGE DAM, CATSKILL AQUEDUCT.

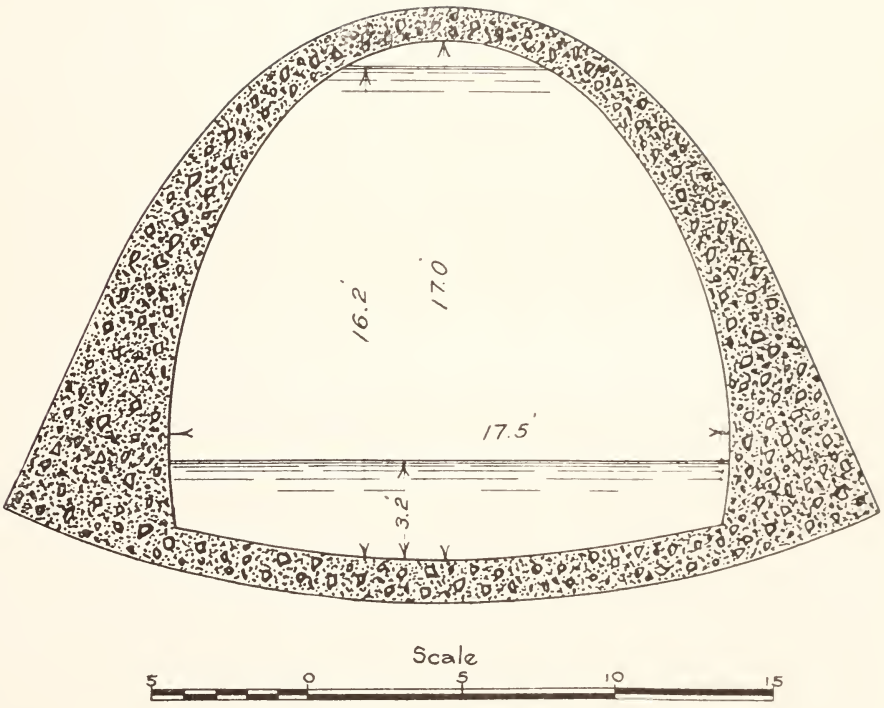
THE NEW AQUEDUCT OLIVE BRIDGE DAM, MASONRY SECTION.

Showing invert and first frames of timber lining of conduit, upstream end.

THE CATSKILL AQUEDUCT.

The figures in the arch show the comparative size of the tube.


CATSKILL
BASIC CREEK
ESOPUS
255 SQ. M.
RONDOUT
Lackawack Res.
Ashokan Res.
Woodstock
Olive Bridge
Shokan
Boiceville
Wawarsing
Burlingham
Crawford
Fine Burh
Montgomery
Newburgh
Fishkill
Wappingers Falls
Poughkeepsie
Hyde Park
Rhinebeck
Red Hook
Clermont
Germantown
Tivoli
Saugerties
Catskill
Coxsackie
Athens
Hudson
Stockport
Stuyvesant
Kinderhook
Claverack
Chatham
Ghent
Philmont
Hillsdale
Copake
Ancram
Millbrook
Pine Plains
Amenia
Dover Plains
Pawling
Patterson
Brewster
Putnam Valley
Peekskill
Croton
Stony Point
West Point
Haverstraw
Nyack
Tarrytown
Sleepy Hollow
Dobbs Ferry
Hastings
Yonkers
New York
Jersey City
Hoboken
Bayonne
Elizabeth
Newark
Orange
Paterson
Passaic
Hackensack
Ridgewood
Rutherford
Lyndhurst
Kearny
Harrison
Bloomfield
Montclair
Caldwell
Boonton
Dover
Rockaway
Morristown
Madison
Chatham
Summit
Elizabethport
Rahway
Plainfield
Somerville
Bound Brook
Bridgewater
Dunellen
Metuchen
Perth Amboy
Woodbridge
Rahway
Elizabeth
Staten Island
Brooklyn
Long Island
Jamaica
Flushing
Hempstead
Freeport
Oyster Bay
Sea Cliff
Huntington
Northport
Babylon
Islip
Patchogue
Riverhead
Greenport
Sag Harbor
Montauk Point
Shelter Island
Gardiners Island
Fishers Island
Block Island
Long Island Sd.
Aqueduct
Croton Aqueduct
New Croton Aqueduct
Croton Lake
Croton Dam
Croton Waterworks
Boards Corners
Last Hill
Pleasant Valley
Poughkeepsie
Milan
Clinton Corners
Rhinebeck



CATSKILL AQUEDUCT.

The lower water level shows extent to which it would be filled by the water supplied to Rome, A. D., 97, 84 million gallons per day; 600 million gallons per day would fill the aqueduct to the upper mark.

recommended for immediate development were Fishkill and Esopus Creeks.

When I came into office January 1, 1904, conditions were practically as the Commission had found them. Previous administrations had collected the data on where water could be obtained and had proved beyond a doubt the need of more water. There remained the all-important problems of financing the undertaking, of providing the administrative body to carry out the work, and of securing the necessary legislation. Your Honorable Board is familiar with how these things were all accomplished after many difficulties had been overcome. On April 6, 1905, I publicly pledged myself to lift the entire enterprise out of partisan politics by allowing the Chamber of Commerce, the Board of Fire Underwriters and the Manufacturers' Association to name the Commissioners of the Board of Water Supply, and further pledging myself to fill any vacancies that might occur in the same way.

I have never violated that pledge, and sincerely trust that the method adopted by me in the beginning will be followed by my successors in office until the work of the Board is completed.

The work of organization was begun immediately on the appointment of the Board, and was pushed with remarkable speed. The plan of work finally adopted has been fully described to your Honorable Board in previous messages from me.

The contract for the main or Ashokan Dam was awarded August 31, 1907, and up to date contracts for the building of twenty-six miles of aqueduct have been let, involving an expenditure, when completed, of $26,700,000, and varying in time from four years to seven years. Since its organization the Board has expended or contracted to ex-

pend for property acquired, contracts for structural work, and for the force employed, about $50,300,000. The work may be said, therefore, to be well under way and the expenditures to date have not varied materially in total from what was originally estimated and approved by the Board of Estimate.

For a period of about two years investigations have been in progress in Suffolk County, and as a result of these investigations the Board prepared a plan and map for an additional water supply for the Borough of Brooklyn, which was approved by the Board of Estimate on June 26, 1908, submitted to the State Water Supply Commission July 29, 1908, and is now before it. The Catskill supply and the Suffolk County well system, will, when fully developed, furnish without detriment to the localities in which they are situated, 1,000,000,000 gallons of water daily. With as much of the present supply as will then remain safe for use, the City of New York will have a daily supply of 1,500,000,000 gallons.

The Esopus watershed, because of its exposure to rain bearing winds and its wooded slopes, furnishes a supply notable for its softness, purity and quantity. This supply and that to be diverted from the Schoharie shed by a ten-mile tunnel through the mountain divide, will be collected in the Ashokan Reservoir. This reservoir will have a maximum depth of 190 feet, and a capacity of 130,000,000,000 gallons. The water will be impounded by Olive Bridge Dam, the adjacent Beaver Kill Dikes, a chain 3.8 miles long, and by the West Hurley and other smaller dikes, aggregating 1.5 miles in length.

The type of construction crossing the Hudson River is yet to be determined. Three practical methods are under consideration and test shafts are now being driven on either side of the river in the vicinity of Cornwall. From the east side of the Hudson the water will be carried to the enlarged Kensico Reservoir, which will hold 40,000,000,000 gallons, and from this reservoir to the distributing reser-

voir at Hill View, just outside of the city of Yonkers, where, from an elevation of 295 feet, the distribution to consumers will begin.

It has been planned, if necessary, to carry this water to Brooklyn and Richmond, but developments of Suffolk County water may make that unnecessary.

GROWTH OF THE FIRE DEPARTMENT.

While the installation of the high pressure system has been the conspicuous accomplishment in the direction of fire protection, the natural units of fire-fighting have not been neglected. The uniformed force has been increased in the last five years from 2,974 officers and men to 4,210, an increase of forty per cent. In the same period twenty-four new engine companies, twenty-four hook and ladder companies and seven hose companies have been organized and seven single companies in service have been reorganized and added to the list of double companies, which now number twenty-six. The hose companies include those now specially drilled to handle the high pressure service, so that there is now in Greater New York a combined force of 249 engines and hook and ladder companies.

Besides the one fireboat completed in 1904, three new boats—the James Duane, the Thomas Willett and the Cornelius W. Lawrence—have been placed in service. These four are high power boats of the latest type. The fleet of ten boats has a pumping capacity of about 78,000 gallons a minute, or equal to the efficiency of 130 land engines of normal capacity—the equivalent of the entire land force of the Boroughs of Manhattan, The Bronx, Brooklyn and Queens. With these new floating engines and the high pressure service, fire protection means have been increased 50 per cent. within the zone of greatest hazard. No harbor in the world has such a force to guard its shipping interests.

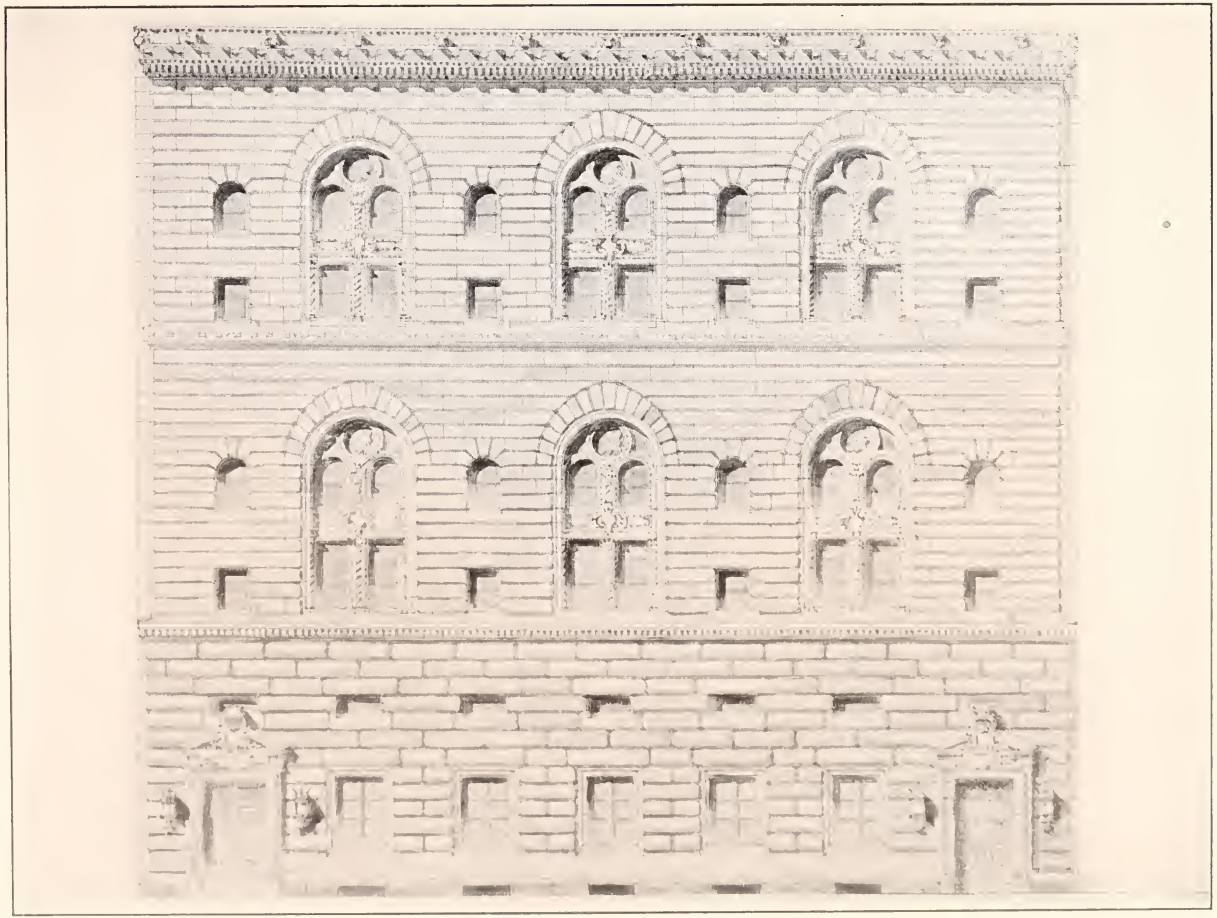
During this administration nineteen new apparatus houses have been built and sixty-four old houses have been altered and repaired, with sanitary improvements for the benefit of the force. Nine new houses are in course of construction and thirteen others are being rebuilt. A new and well equipped repair shop offers every advantage for the quick repair of hose and other apparatus.

Under the direction of the leading experts of this country plans have been prepared for a new fire alarm telegraph system in the Borough of Manhattan, and it will be your duty to pass upon the request of the Fire Commissioner for an appropriation to install this system, which will dissipate the last objection of the Board of Fire Underwriters to a general reduction of insurance rates. In the meantime a modern telephone system connecting all the apparatus houses with the central office has been put in operation and serves as a supplementary alarm system. By an arrangement with the telephone company all these wires pass through the Plaza Station, where the City may set up and maintain an emergency central office in case of any breakdown of the telegraph or telephone systems.

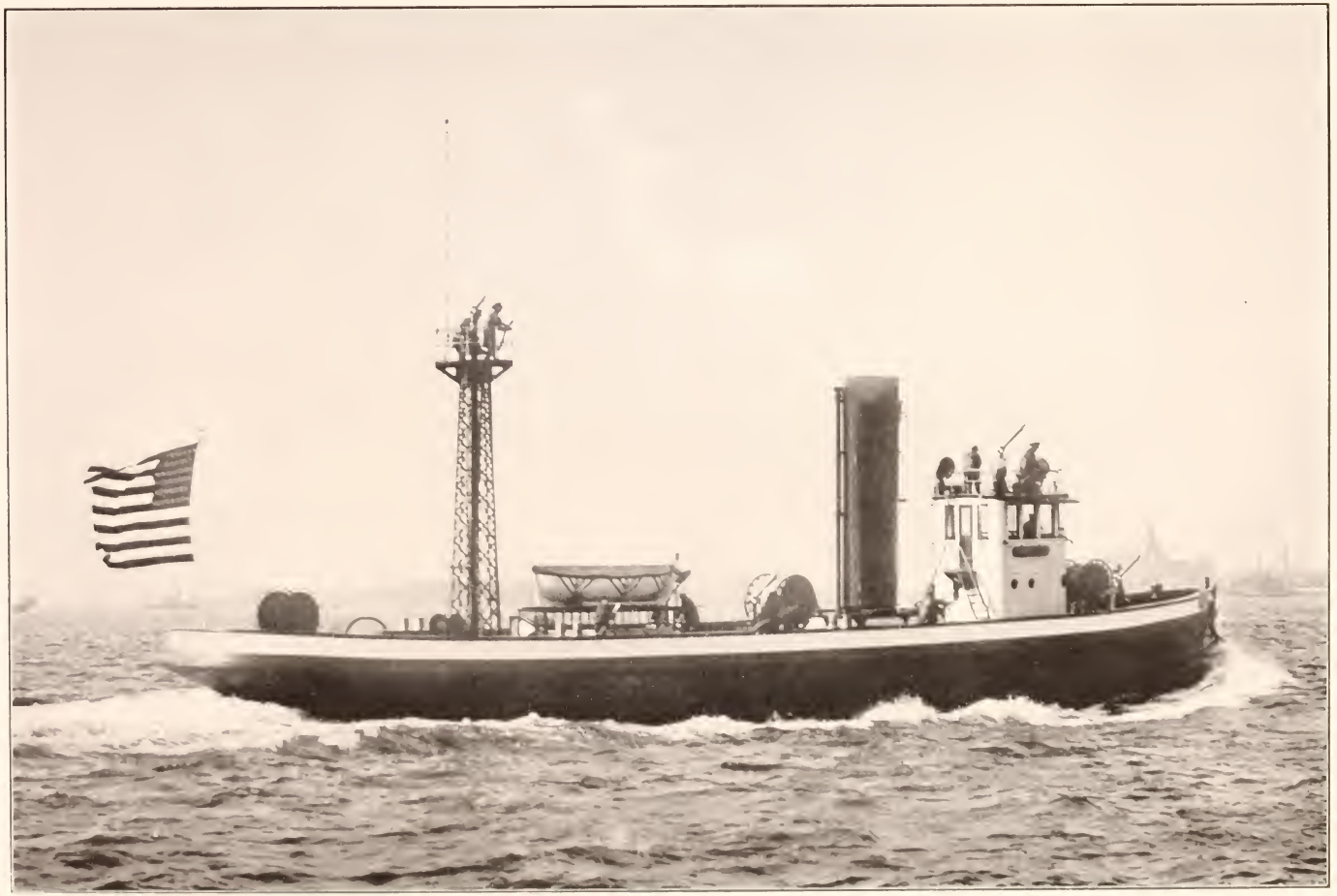
A general plan of placing all alarm wires underground for the protection of the system has been followed, and the only wires remaining overhead in the Borough of Manhattan are those in the Washington Heights section and these, in the near future, will be placed under the streets.

Some idea of the activities of the Department may be gained from these statistics: From January 1, 1904, to October 1, 1908, the Department responded to 43,316 alarms in the Boroughs of Manhattan, The Bronx and Richmond, and to 20,143 in the Boroughs of Brooklyn and Queens.

Twelve days before I took office the then Fire Commissioner created a bureau of violations and auxiliary fire appliances, and his successors have amplified the work of that bureau, as has been demon-

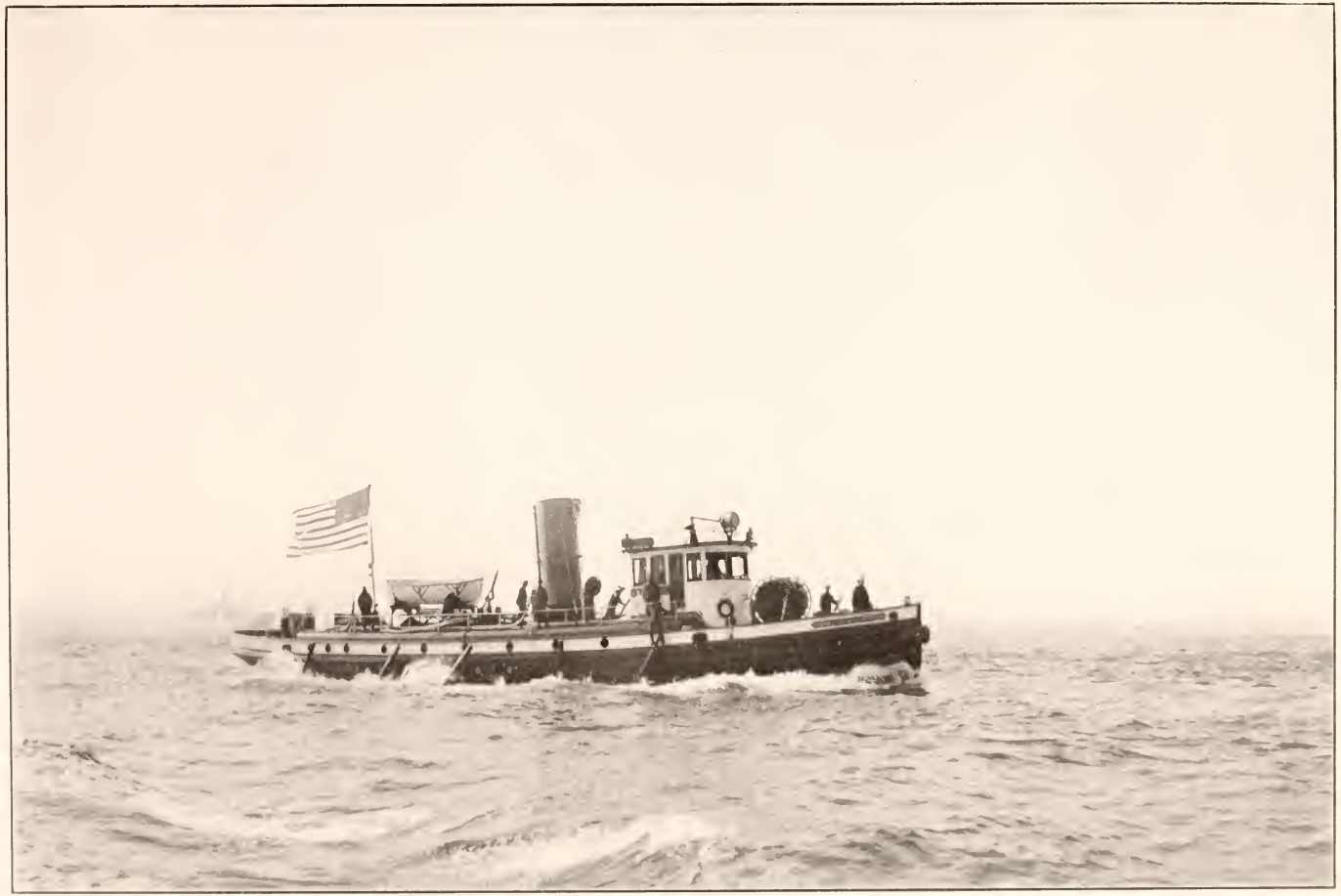


NEW FIRE HEADQUARTERS.



FIREBOAT JAMES DUANE.

(The Thomas Willett, also new, is of the same type.)



NEW FIREBOAT CORNELIUS W. LAWRENCE.

THE FIREBOAT FLEET.

From left to right: The Seth Low, Zophar Mills, Cornelius W. Lawrence, William L. Strong, Abram S. Hewitt, George B. McClellan, James Duane, Thomas Willett, The New Yorker. The David A. Boody, not shown, was in dry dock.

THE THOMAS WILLETT IN ACTION.

One of the newest of the fireboats using all her streams.

strated by the protective measures enforced on all theatres and places of public meeting and by the use of stand-pipes, special fire alarm connections and the numerous devices approved by the fire underwriting interests. Through the Fire Marshals the Department has closely followed fire causes and has secured 136 convictions for arson.

The work of the Municipal Commission on Explosives and the Bureau of Combustibles has increased notably because of the great constructive works calling for the use of dynamite and other high explosives and the larger use of the inflammable products of petroleum. In the Boroughs of Manhattan and The Bronx alone there are 23,000 places selling or storing inflammable or explosive materials, and all are subject to inspection by the Department.

The paid system has been carried into Rockaway Beach, Far Rockaway, Jamaica, Richmond Hill, Flushing and College Point in the Borough of Queens, reducing the number of volunteer companies to forty-two. Of the original fifty-seven volunteer companies in Richmond, only thirteen remain, the paid service being now general in that Borough. Outside of Long Island City the Borough of Queens is provided with a well-equipped fire alarm system which, under this administration, has been extended into Bayside, Douglaston, Queens and Springfield, with a central station at Jamaica.

Time off for the men has been increased, so that in addition to one day off in five each man has four additional leaves of twelve hours each month as well as his annual vacation. Considering the work of the uniformed men, their time off is well earned.

GAS AND ELECTRICITY.

Since January 1, 1904, the lighting of the City has been almost entirely changed. The first decided improvement was made in 1904, when some 16,000 of the old gas lamps in Manhattan and The Bronx were changed to mantle lamps. A beginning was also made in add-

ing to the arc lighting along the main streets. This was somewhat difficult on account of the high prices demanded, but early in 1905 prices were reduced by statute, and since then this work has gone on rapidly. In Manhattan the first section requiring complete electric lighting, on account of extreme congestion, was the lower East Side. This was accomplished in 1905 and 1906. Additional lighting was given to streets under elevated railroads and to the open spaces of the City where great assemblages frequently occur. The lighting at all main street car crossings was doubled and points of danger given special attention.

In the northern part of Manhattan Island and in The Bronx, the lighting lines were extended with the growth of the population. Where these sections were at all congested they were treated as in Manhattan. In 1905 the scheme of lighting improvement was extended to Brooklyn, and the same extensive changes made as in Manhattan. The great area not yet settled in Brooklyn makes the extension of lighting somewhat slow, because of the necessity of constructing gas and electric mains. It has been closely followed up, however, and now even the remote sections, where inhabited, are well lighted.

In 1906 the system was extended to Queens and work on similar lines begun in Richmond. Even more difficulty was met with in Queens on account of lack of gas and electric mains, so that many mantle naphtha lamps were used in place of them. Sections poorly lighted by sparse arc lights were relighted with mantle gas lamps, the distribution of light being greatly improved by this method.

In the last year or two the new high efficiency electric incandescent lamps have been used with great effect in this Borough. The greatly increased illuminating power of these lamps makes them peculiarly suitable for lighting along country roads, park avenues and sparsely inhabited sections. There are few places in the country

Bishop's Crook Post.

Boulevard Gas Post.

Lyre Top Post.

TYPES OF POSTS USED IN STREET LIGHTING.

where they have so rapidly come into use or where there are more of them. These lamps are now being installed in Richmond.

TABLE SHOWING LAMPS AND CANDLE POWER.

January 1, 1904, and October 10, 1908.

January 1, 1904.	Number of Lamps.	Estimated C. P.	Number of Street Sign Lamps.	Free Lamps Included in Other Column.
Electric	16,704	6,002,900	492	89
Gas	41,694	967,864	1,404	..
Naphtha	4,058	130,392	....	..
Oil	100	1,200	....	.
Total	62,556	7,102,356	1,896	89

October 10, 1908.	Number of Lamps.	Estimated C. P.	Number of Street Sign Lamps.	Free Lamps Included in Other Column.
Electric	20,414	8,401,030	....	185
Gas	43,892	2,627,232	....	..
Naphtha	4,047	242,244	....	..
Oil	....	.....	....	..
Total	68,353	11,270,506	....	185
Total increase	5,797	4,168,000	....	..
Total per cent. increase	9%	58%		

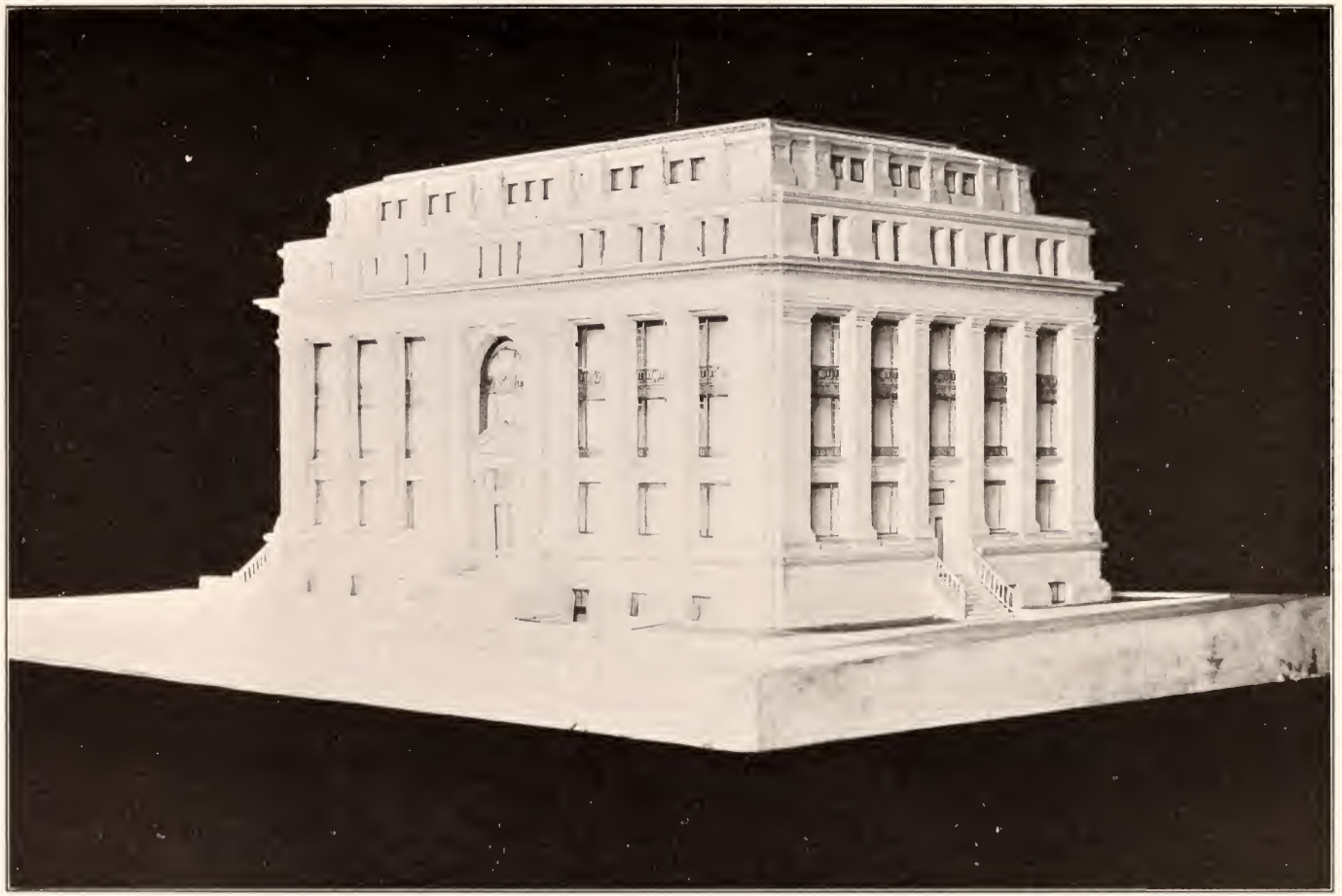
The candle power given for the lamps of all kinds is as close an approximation of the actual as can be obtained; for instance, the nominal 2,000 C. P. electric arc lamp is figured at 480 C. P. maximum.

DEPARTMENT OF HEALTH.

Reduction of Death Rate.

I especially desire to call the attention of your Honorable Board to the work of the Health Department during the past five years. There is no other department of the city government, the operations of which are of such vital concern to our people. Since 1903 the work of this Department has increased tremendously, but the results achieved more than justify the expenditures of money that have been made. As a matter of fact the money expended by the City in the maintenance of the Health Department has been a comparatively small factor in the results accomplished. It is to the unselfishness and devotion of the men I have been fortunate enough to have in command in the Department of Health that the City owes the remarkable decrease in the death rate since 1903. To Dr. Darlington, Dr. Bensel and Dr. Biggs, New York owes a debt which it can never pay.

In 1903 there were 997 employees in the Department of Health. There are now 2,351. This increase has been due to my determination to develop to the utmost, every possible line of work leading to the preservation of life and health in this city. For the first eleven months of the present year the death rate was the smallest ever known in our history. For the first eleven months of 1904 there were 71,725 deaths, a death rate of 20.06 per thousand. During the same period of time this year there were 67,311 deaths, a death rate of 16.60 per thousand, a decrease of 3.46 points. This tremendous saving of life will be better understood when I state that had the death rate of 1904 prevailed during the present year there would have been 15,302 more deaths during the last eleven months than occurred. It is only fair to the Tene-



NEW HEADQUARTERS, HEALTH DEPARTMENT, BOROUGH OF BROOKLYN.

Flatbush Avenue and Willoughby Street.

Bradford Lee Gilbert, Architect.

SANITORIUM AT OTISVILLE, N. Y.

Department of Health, City of New York.

GROUP OF BUILDINGS, SANITORIUM AT OTISVILLE.

Department of Health.

ment House Department, the Charities Department, the Street Cleaning Department and Bellevue and Allied Hospitals, to give each its share in this. The functions of these departments allie them closely with the Department of Health, and much of what the latter may accomplish depends upon their efficient administration. In the face of such results as have been shown, I do not believe that there can be any serious criticism of the large amounts of money appropriated for the work of these departments by the Board of Estimate and Apportionment.

In connection with this saving of life I wish to call the attention of your Honorable Board to the section added to the Sanitary Code in 1904 prohibiting the sale of carbolic acid in a stronger solution than 5 per cent. In 1903 there were 345 deaths in this City due to suicide by carbolic acid. These figures were startling enough to lead to an investigation by the Department of Health, the result of which was to convince the city physicians that some restriction on the sale of this poison would materially reduce the number of deaths of this character. Accordingly the addition to the sanitary code mentioned above was passed, and in 1904 the suicides by carbolic acid dropped to 294. In 1905 they dropped to 89, in 1906 to 73, in 1907 to 47, while during the first eleven months of the present year there were but 43.

Tuberculosis.

In the Department of Charities, the Department of Health and Bellevue and Allied Hospitals a constant war has been waged against tuberculosis, and the educational work that has been done, notably through the recent tuberculosis exhibit at the Museum of Natural History, has been of incalculable benefit to our people.

Dr. Robert Koch who, in 1882, definitely placed tuberculosis in the group of infectious, communicable and preventable diseases, has recently paid our City one of the greatest compliments it has ever re-

ceived. He stated that conditions in the campaign against tuberculosis in New York City are almost ideal.

Through its different departments the City is making every possible effort to provide adequate facilities for the care of tuberculosis patients and there are already nearly 3,500 beds available, supported wholly or largely by the City. I call the attention of your Honorable Board to the fact that this is 25 per cent. of the hospital accommodation for cases of tuberculosis in the entire United States.

In November, 1905, 1,300 acres of land at Otisville, Orange County, New York, were purchased by the City for use as a sanatorium for incipient cases of tuberculosis. It now has accommodations for 250 patients, and it is our purpose to add 750 beds as soon as possible. It is estimated that these additional beds can be installed for $300,000, or $400 a bed. The cost per bed in public and private hospitals recently built in New York City is from $2,500 to $5,000.

With these beds, the 200 beds in the Riverside Hospital on North Brother Island and the 1,500 additional beds in the sanatorium on Staten Island, now being erected by the Department of Charities, there will be in the entire United States about 16,500 beds exclusively for tuberculosis, of which this city will have 6,000, or about 36 per cent.

The success of the Otisville Sanatorium has been demonstrated. During the two years of its existence there have been but two deaths from tuberculosis. Five hundred patients have been discharged, of whom 20 per cent. have been completely cured, and in the remaining 80 per cent. the disease has been completely arrested, so that in all cases after six months at Otisville the patients have been able to return to their families and their work, with comfort to themselves and safety to the community. At the International Tuberculosis Congress recently held at Washington, this Sanatorium was awarded a silver medal for its high standard of excellence. At the same Congress gold medals

were awarded the Department for its method of supervision of tuberculosis.

Some idea of the extension of this work by the Department of Health may be gained from the fact that while in 1904 there were 16,971 specimens of sputum, examined for bacilli of tuberculosis, there were during the first eleven months of this year 26,793 such examinations. In addition to this, clinics for the free treatment of tuberculosis have been opened in the Boroughs of Manhattan, Brooklyn and The Bronx.

Contagious Diseases.

In 1904, 7,790 patients ill with contagious diseases were treated at the hospitals of the Health Department. During the first eleven months of 1908, 10,090 such patients were treated. Because of the accommodation the City has been able to secure for these cases it has been possible to obtain more control of the spread of infection. Every case of contagious disease that the City is able to care for means the removal of a case from a home, and the consequent elimination of the danger of the disease spreading. I deem it proper to call your attention to the work along this line that has been done at the Kingston Avenue (Brooklyn), the Willard Parker and Riverside Hospitals. In the former we have installed the following improvements since 1904: A scarlet fever pavilion, a measles pavilion, a morgue, an incinerator building, two cold storage buildings, a stable, a disinfection station, a boiler house and a nurse's home. The improvements at the Riverside Hospital during this period are a disinfecting station at the foot of East One Hundred and Thirty-second street, a storehouse, a cold storage building, a laundry, a rest cure pavilion, a morgue, a dormitory, a solarium, isolation wards, a gas house and a nurse's home. At the Willard Parker Hospital the improvements are a scarlet fever pavilion, an administration building, a laboratory building, a store room and a refrigerating plant.

In 1906 the Department launched the contagious diseases boat Riverside, which is the model craft of its kind in the world. This boat is used to transport patients between the Willard Parker and Riverside Hospitals, and is equipped with every prevention of infection known to medical science. It has wards for the sick, a special deck for convalescents and ample quarters for nurses and physicians. In spite of the large expenditures already made, still more accommodations are needed, and I believe that your Honorable Board will agree with me that unlimited provision should be made for this purpose.

Two years ago Dr. Robert Gibson, a bacteriologist of the Health Department, perfected a method of concentration of diphtheria antitoxin, which has been in use by the Department, and which has proved so valuable that it has now been adopted by all manufacturers, as well as by all the City and State laboratories in the United States, and is beginning to be used abroad. During the past year this method has been still further perfected by Dr. E. J. Banzhaf. These processes have been of great importance in the administration of antitoxin and reflect great credit upon the department.

Milk Supply.

The City of New York receives its supply of milk from six different States: New York, New Jersey, Pennsylvania, Vermont, Massachusetts and Connecticut. About 40,000 farms and dairies ship milk to the City. Before 1905 the control of the milk supply was purely local and consisted of the inspection of the shops where milk was sold at retail. Since that date a system of inspection of the farms and dairies has been instituted, with the result that no dairy or creamery can now ship milk to New York City unless it has conformed to the sanitary requirements of the Department of Health. The number of inspectors of milk has been increased from seven, in 1903, to 42 in 1908, and will be still further increased this year.

School Inspection.

The exclusion from school attendance of children suffering from contagious diseases has decreased from 65,294, in 1903, to 10,146, in 1907. This decrease is due to improved methods of the control of these diseases in the schools, and is largely the effect of the valuable work performed by the school nurses.

In 1905 the system of the complete physical examination of each school child was instituted. Since that date 626,737 children have been examined to determine the presence of non-contagious physical defects. Over 80 per cent. of the children examined have been found to be suffering from some physical abnormality. The nurses visit these children at their homes and instruct the parents in regard to the necessity of treatment. The system has been carried out in its present developed state only since the beginning of this school year, and it is yet too early to give definite data, but judging from the results already obtained, it would seem that this work is potentially one of the most important ever undertaken in the line of preventive medicine. It is already looked upon as a model, not only in this country, but also by the cities of Europe.

Mosquito Extermination—Staten Island.

Since 1905 a vigorous campaign against mosquitoes has been waged on Staten Island by the Board of Health under the direction of Dr. Alvah H. Doty, Health Officer of the Port. This warfare has been conducted not only against the striped legged variety, which is most responsible for the great annoyance caused by this insect along the Atlantic Coast, but also against the inland mosquito, of which the "Anopheles," or malarial mosquito is the most dangerous. The work has been attended with the greatest success, especially that against the malarial mosquito.

In the year 1905, when the work was begun, 91 cases of malaria were reported on Staten Island. The following year 68 cases were reported. In 1907 there were but five cases, and last year but three cases. There is no doubt but what this remarkable falling off is due entirely to the work of the Department of Health in this Borough.

In order to wipe out the breeding places of the striped-legged mosquito, an appropriation of $17,000 was made to the Department of Health in the latter part of 1905, and the draining of swamps was immediately begun. The winter of 1905-6 was very mild, and it was possible to continue the work without interruption. In sections along the edge of the swamps on the south side of the Island are many summer resorts, which prior to 1905, suffered severely from swarms of mosquitoes. At these places the results of drainage are very marked. The mosquitoes have practically disappeared. Equally good results were obtained in sections further in the interior.

In 1907 an additional appropriation of $25,000 was granted for the work, and in November, 1908, Dr. Doty reported that the entire swamp land on Staten Island had been drained. All that is necessary now is to keep the ditches clean and free of driftwood, in order to allow of the proper discharge of their contents.

Not only has this work destroyed the breeding places of the mosquitoes, but it has also reclaimed the land for building and agricultural purposes, as shown by the fact that during the last year the salt-water hay found on these swamps, which is worth from $7 to $8 a ton, was harvested. In all, some 600 miles of ditches have been dug, and from ten to twelve square miles of swamp land drained during the past three years.

The war against the malarial mosquito was also conducted vigorously. Thirty thousand circulars were distributed throughout the Island during 1906 and 1907 explaining how the breeding places of these pests might be located and destroyed. The Department had the

active co-operation of the people of the Borough. No such remarkable falling off in malaria as the direct result of a crusade against mosquitoes has ever been reported by any community.

The figures which I have given do not, of course, include the cases received at the Marine Hospital at Stapleton, all of which were removed from incoming vessels, and cannot, therefore, be credited to the Borough.

Dr. Doty assures me that there is no doubt of the ultimate complete extermination of the malarial mosquito on Staten Island.

DEPARTMENT OF PUBLIC CHARITIES.

The past five years have seen progress of a most gratifying nature made in this Department. Improved methods of operation have been introduced, and many new buildings have been erected, until to-day it is one of the best equipped departments of the city government, both in plant and personnel.

Not only has Commissioner Hebberd arranged adequately to meet the demands of the present time, but also the demands of the future. For the first time we have to-day a topographical survey of Blackwell's Island, and the maps and plans that have been made, looking to the ultimate development of the Island as a hospital park, have been approved by the Art Commission. When these plans are carried to consummation, I question if any municipality in the world will have a hospital park approaching it in location and facilities.

Like surveys have been made of other properties, and this method will, I feel sure, be a big element in the upbuilding of this most important Department, and in helping us to avoid the wasteful, unbusiness-like and unscientific practice of previous years whereby structures differing widely in architectural form as well as in color and material, have been placed haphazard without study of future growth or needs.

Proper provision for the housing of doctors, nurses, orderlies and other employees is essential to proper administration in a Department. Eight hundred and eighteen such employees are now being cared for in this manner. In addition, the equipment has been greatly improved, particularly in the boat and ambulance service and by the installation of fire-fighting apparatus. The dietary of each institution has also been improved, and the examination of food supplies made more rigid than ever.

The subsidiary accounts of the Department, which in previous years were a source of much scandal, have been carefully safe-guarded through the employment of bonded clerks, improvement in the system of bookkeeping, and more frequent inspection of the Auditing Department.

Through the generosity of Mrs. Russell Sage the income of $300,000 is being used to build up the very important pathological work of the City Hospital and the City Home, Manhattan.

Blackwell's Island.

At the City Hospital a new staff house, a superintendent's residence, a large kitchen, dining-room and service building, a new power house, a female helpers' dormitory, and a kitchen and dining-room building at the Nurses' Home, have been added. With the removal of the penitentiary as planned, a large additional area of ground will be given over to the purposes of this hospital. Through the acquisition of a new pier at the foot of East Fifty-third Street, on the grade level, taking the place of the pier at East Fifty-second Street, which was reached by a long flight of stairs, and the construction of a new waiting room, the approach to the hospital ferry has been greatly improved.

At the Metropolitan Hospital a new building, with a capacity for over a hundred nurses, has been added to the plant, while the present nurses' home has been enlarged by the construction of a commodious

NEW BRADFORD STREET (BROOKLYN) HOSPITAL.

NEW NURSES' HOME, KINGS COUNTY HOSPITAL.

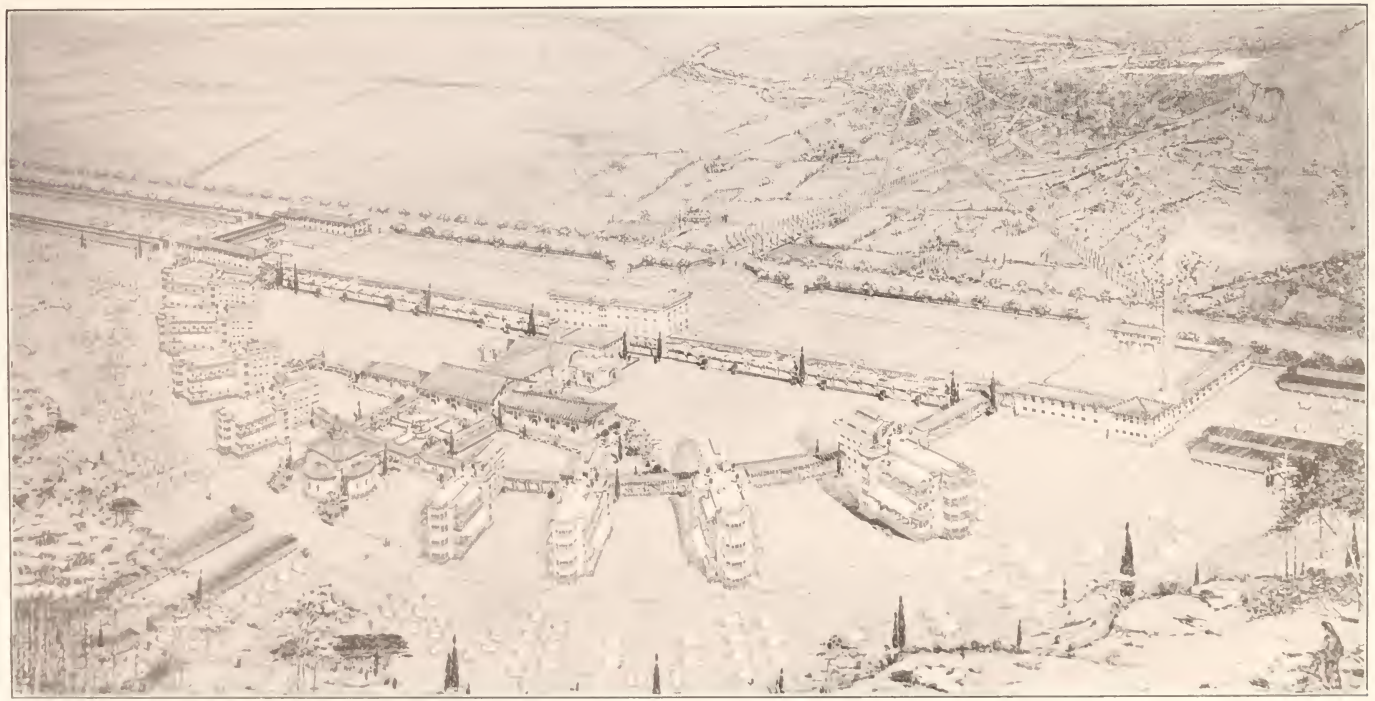
Clarkson Street and New York Avenue.

Helmle & Huberty, Architects.

NEW CONEY ISLAND HOSPITAL.

Ocean Parkway, near Avenue Z.

Helmle & Huberty, Architects.



SEA VIEW SANITORIUM FOR TUBERCULOSIS PATIENTS.

(Staten Island.)

wing. Beside these improvements, a male helpers' dormitory and a kitchen and dining-room building has been added to the equipment of the Tuberculosis Infirmary. The construction of two new tuberculosis hospital pavilions at this institution has been authorized at a cost of $480,000, while the power plant and the laundry are being extended at an approximate expense of $150,000.

A contract has been let for the construction of a new staff house at this hospital, and the erection of a new morgue and pathological building has also been authorized.

Contracts have been let for the preliminary work necessary for the lighting of all the hospitals on Blackwell's Island by electricity.

The City Home for the Aged and Infirm has also been the scene of extensive improvements. New reception pavilions for male and female inmates, with extensive bathing and fumigating apparatus, are now ready for occupancy, a new operating pavilion is completed, while a new neurological hospital building and a day room, which has been greatly needed for years, are in course of construction. As soon as these buildings are ready the fire risk will be minimized through the destruction of old wooden buildings which have been in use for many years.

Randall's Island.

At the children's hospitals and schools two new isolation buildings have been added, thereby helping to control the occasional outbreaks of contagious diseases among the children, while five thoroughly equipped toilet towers have been added to as many buildings in which the feeble-minded and the epileptic receive care.

The dormitory for male helpers on this Island, in which the employees slept in cells, has been entirely reconstructed by removing the cells, substituting beds and making other changes and improvements. Plans have also been prepared for the construction of a new nurses' home in connection with the Children's Hospital. A new dock has

been acquired at the foot of East One Hundred and Twentieth Street for the ferry to Randall's Island. Inasmuch as the State proposes to take the feeble-minded and epileptic inmates of the Randall's Island institutions to the new State Colony near Theill's, in Rockland County, and to remove the inmates of the House of Refuge on Randall's Island to a proposed new institution near Yorktown Heights in Westchester County, it has been thought best to move slowly in the matter of expenditures for construction. There is no reason, in my opinion, why, in course of time, Randall's Island should not be developed into a beautiful park for the sick children of the poor.

Borough of Manhattan.

The new Municipal Lodging House on East Twenty-fifth Street, the construction of which has been delayed through serious engineering difficulties, is nearing completion. It will provide accommodation for as many as 1,000 homeless men and women, with every convenience for bathing and fumigation. It will be the most complete building of its kind ever erected, and a valuable and unprecedented contribution to the humanities, as well as the sanitation of the City.

Borough of Brooklyn.

In this Borough the Department now has its own office building. In it are housed the general borough officers, the Bureau of Dependent Adults, and the Children's Bureau. The new Coney Island Hospital, which will be the first general public hospital constructed in the Borough for many years, is rapidly approaching completion. It has a bed capacity of 100, and can readily and economically be enlarged so as to provide for double that number. It has, in addition to the main building, a new nurses' home and separate quarters for the male and female help. In connection with this hospital, to provide for future extension, real property to the extent of twenty acres has been acquired on the Ocean Parkway.

For the new Bradford Street Hospital a site has been purchased and plans are now in course of completion for the hospital building, the construction of which, at a cost of $250,000, has been authorized. At the Kings County Hospital, Flatbush, a new psychopathic pavilion and a new Nurses' Home have been erected, and a morgue and pathological building are in course of construction. Plans have also been prepared and the means provided for the addition of a new wing to the hospital itself. All of these improvements will add greatly to the facilities of this institution.

Borough of Richmond.

In this Borough, what I regard as one of the greatest works ever undertaken by the Department of Charities, is now well under way. I refer to the new Sea View Sanatorium. This work was considerably delayed by court proceedings, but the contracts for six of the eight pavilions have been let at a cost of $873,000, and it is expected that some of these pavilions will be so far advanced in construction that they can be roofed over before the work is discontinued for the winter. This great tuberculosis sanatorium, which will equal in design and equipment any ever constructed, will ultimately provide effective care for 1,500 patients.

The Department has also obtained a pier at Mariner's Harbor, and has built three new cottages for the care of the poor, and a new dormitory of thirty beds for the use of male employees.

Present Conditions.

As a result of the work of the past five years it may be stated that the Department of Public Charities is in plant, equipment and administration, in better condition than ever before in its history.

The institutions of this Department are subject to the constitutional supervision of the State Board of Charities, whose report for

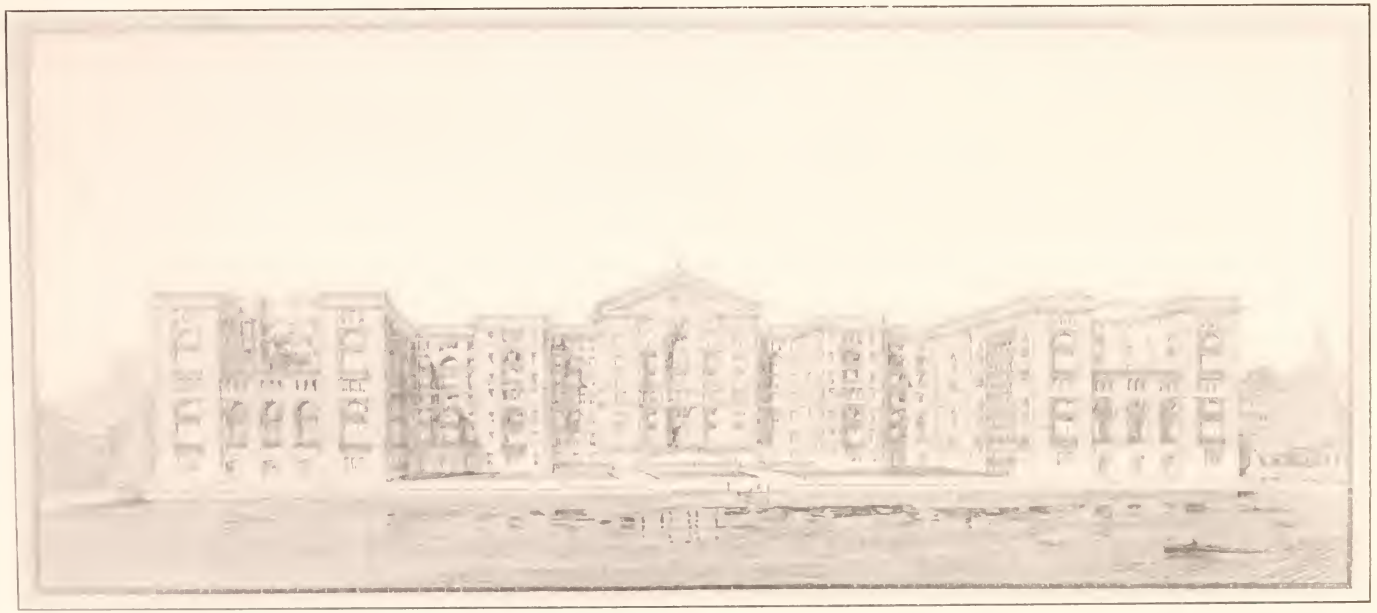
1907 contains the following statement with relation to the improvements that have been made:

"In conclusion, your Commissioner wishes to emphasize his satisfaction at the generous consideration given by the administration of Mayor McClellan to the request for the appropriations for new buildings, for improvements, and for more adequate maintenance made by the Commissioner of Public Charities. The results are most marvelous. Should reasonable applications yet to be made by this Department of The City Government within the next few years meet with the same favorable action by the Mayor and the Board of Estimate and Apportionment, the reproach which has so long been laid at the door of our City that it has neglected its sick poor while spending lavishly for other purposes, will be removed and our citizens enabled to 'point with pride' to well-planned and maintained public hospitals and homes, as for a generation they have called attention to the excellence of many of the charitable institutions supported by private benevolence."

BELLEVUE AND ALLIED HOSPITALS.

It has been the policy of this administration to keep the work of these hospitals up to the very highest point of efficiency, and under the energetic direction of Dr. Brannan, this has been possible without any extraordinary expenditure of money. There are no similar institutions in the city the work of which is so close to the mass of our people, and it should be a matter of pride to us all to note what has been accomplished during the past five years in this field of municipal activity.

First in importance are the new buildings which have been erected. These are Harlem and Fordham Hospitals, opened on May 1, 1907; a new wing at Gouverneur Hospital, opened in the fall of 1907; Pavilions A and B of the new Bellevue Hospital, opened on Novem-



NEW BELLEVUE HOSPITAL.

View from the East River.

McKim, Mead & White, Architects.

TRAINING SCHOOL FOR WOMEN NURSES.

(Bellevue Hospital.)

HARLEM HOSPITAL

Southern Boulevard and Crotona Avenue, The Bronx.

ber 4 last, and the new Training School for Nurses at Bellevue, which will be opened in February.

The Harlem and Fordham Hospitals accommodate 150 patients each, the new wing at Gouverneur Hospital accommodates 63 patients and Pavilions A and B, at Bellevue, 397 patients, a net increase of 660 beds.

In addition to the completion of the two pavilions at Bellevue, the new pathological department and the dormitory for men employees are well advanced and will be completed next summer. Contracts have also been awarded for a new boiler house and a coaling station. The bulkhead wall under construction by the Department of Docks and Ferries is being pushed rapidly and will shortly add two and one-half acres to the grounds of the hospital.

The new building for the training school of women nurses at Bellevue is practically completed. It will accommodate 300 nurses. Plans for a training school at Harlem Hospital have also been prepared.

Upon the opening of the Harlem and Fordham Hospitals, the nursing of patients, which was formerly furnished by the training school of the City Hospital, was assumed by this department. Owing to the impossibility of procuring pupil nurses it was necessary to appoint graduate nurses at a salary of $600 a year. Later, a course in post-graduate nursing was established and the majority of the graduate nurses have now been replaced by post-graduate nurses at a salary of $300 a year.

Considerable attention has been given during the five years to the rules and regulations affecting the medical service of the department. A rule has been adopted requiring professional experience varying from three to ten years in all appointees to the visiting staff, also a rule requiring the presence of a visiting or assistant visiting surgeon at all operations involving general anæsthesia.

The most important improvements in the administration of the department are the appointment of four paid admitting physicians at Bellevue to examine all applicants for admission, the appointment of two trained nurses to devote their entire time to investigating the needs and home conditions of patients about to leave the hospital, in order to supply needed relief, through the co-operation of philanthropic societies and from a fund established by voluntary contributions; the establishment of day camps aboard the disused ferryboats "Southfield" and "Westfield," for patients suffering from tuberculosis; the supplying of tooth brushes to all patients in the hospitals of the department, and the appointment of forty dentists at Bellevue to care for and treat the defective teeth of patients, particularly children.

A new system of recording cases has been prepared by the Medical Board, a system that has since been adopted by many of the leading hospitals throughout the country. It is also gratifying to note that the nomenclature established by the Medical Board of Bellevue has been made national in its application through its adoption by the authorities in Washington. A volume of medical and surgical reports of cases treated in the hospital which have special scientific interest has been prepared by members of the visiting staff and published. Four additional volumes are now in course of preparation.

It is proposed to establish a neuro-psychiatric department, in which the patients suffering from mild mental disease and functional nervous diseases will be grouped. It is planned to place the alcoholic service also in this department. This grouping will enable the physicians who are skilled in mental diseases to separate those patients in whom alcoholism is an expression of a mental illness from the wilful and habitual drunkards, enabling the former to receive the scientific treatment which they require, and prevent imposition on the city by the latter class.

DEPARTMENT OF EDUCATION.

New York City is traditionally liberal in the matter of public education. During the past five years the demands on it for this purpose have grown at a greater rate than ever before in our history. It has been the constant aim of the Board to return to the community, not only in facilities for obtaining education, but in actual education, full value for every dollar expended. As Mayor of the city, I am very proud of what has been accomplished in this direction during the past five years. There is no such thing as being satisfied with the work of a department of this character, for, with a population which grows like ours, there is always more to be done. But the record is an excellent one, as the statistics which I have the honor to place before you show.

Since 1904, the new sites acquired number 179, not including 11 sites authorized to be acquired. Ninety-six new buildings and 134 additions to existing buildings have been erected in this time, providing 226,552 sittings. In addition to this, 14 new buildings and 14 additions, providing 45,380 sittings, are under contract.

On June 30, 1904, there were 501 schools under the jurisdiction of the Department. On September 30 last there were 522 schools. This apparent inconsistency with the above statement of new buildings opened is due to the consolidation of schools and the abandonment of many of the old and smaller buildings.

Statistics of School Attendance.

	1903-1904.	1904-1905.	1905-1906.	1906-1907.	1907-1908.
Net enrollment in all schools	622,201	655,503	680,322	695,014	710,695
Average daily attendance	466,571	487,095	505,827	523,084	545,098
Average register in high schools	19,330	20,770	21,493	22,031	23,264
Average register in training schools	758	899	1,217	1,463	1,713
Average register in elementary schools	466,925	515,526	520,811	550,474	560,782
Average register in kindergartens	13,645	13,911	15,630	16,785	20,584

On January 31, 1904, there were 75,460 pupils on part time in the city. On June 30 last there were 55,965. In this connection I wish to state that a school day for part time pupils is 3¾ hours, while the regular school day is 5 hours.

Ten evening high schools and 65 evening elementary schools were operated in the season of 1903-1904. This season 15 high and 85 elementary evening schools are in operation. In addition, the Board has continued the vacation schools, vacation playgrounds, evening recreation centres, open air playgrounds, afternoon roof playgrounds, evening roof playgrounds, piers, baths, kindergarten centres, etc.

The number of lecture centres has been increased from 143 in 1904 to 178 in 1908 and the number of lectures delivered from 4,665 to 5,572. The attendance at these lectures has grown in proportion.

New buildings for the New York Training School for Teachers and the Brooklyn Training School for Teachers were opened in 1907. In 1906, the State Normal School, located at Jamaica, was taken over by the Board of Education, and is now the Jamaica Training School for Teachers.

Among the important buildings opened since 1904 are:

DeWitt Clinton High School, Manhattan, opened 1906.

Stuyvesant High School, Manhattan, opened 1907.

Manual Training High School, Brooklyn, opened 1905.

Commercial High School, Brooklyn, opened 1906.

Erasmus Hall High School (part), Brooklyn, opened 1906.

Eastern District High School, Brooklyn, opened 1907.

Bryant High School, Long Island City, Queens, opened 1904.

Curtis High School, New Brighton, Richmond, opened 1904.

A site for a new building for the Washington Irving High School, on Irving place, East Sixteenth and Seventeenth streets, was acquired in 1906 and 1907.

DE WITT CLINTON HIGH SCHOOL.

Tenth Avenue and West Fifty-ninth Street, Manhattan.

C. B. J. Snyder, Architect.

COMMERCIAL HIGH SCHOOL.

Albany Avenue, Bergen and Dean Streets, Brooklyn.

TYPES OF MODERN SCHOOLS.

Public School No. 152, Avenue G and East Twenty-third and Twenty-fourth Streets, Brooklyn.

TYPES OF MODERN SCHOOLS.

Public School No. 66, Eighty-eighth Street, near First Avenue, Manhattan.

A site for a supply depository building on First avenue, East Sixty-seventh and Sixty-eighth streets, was acquired in 1907.

A site for a new high school in Brooklyn, on Irving and Putnam avenues, was obtained in 1908 through the co-operation of the Department of Parks.

A site for a parental school was acquired in 1904, and the buildings are far advanced toward completion.

In 1905 a beginning was made in the establishment of classes for crippled children, and in the following year two schools for crippled children established as private institutions were taken charge of by the Board.

In 1907 the Board secured from the Navy Department the loan of the gunboat "Newport" as a training ship for the New York Nautical School, to take the place of the antiquated "St. Mary's."

The first public school for deaf mutes in this city was opened in September, 1908.

A special school for backward and defective children was established in Public School 120, Manhattan, in 1906.

In 1905, special attention having been directed to the physical condition of the public school children, the Board of Estimate and Apportionment, on the request of the Board of Education, authorized the issue of Corporate Stock to the amount of $500,000 for the acquisition, construction and improvement of sites for four athletic fields. In that year and the following year sites were purchased as follows:

Adjoining the Curtis High School, Richmond (Curtis Athletic Field); on Avenues K and L, East Sixteenth and Seventeenth streets, Brooklyn (Brooklyn Athletic Field); on Orchard and Munson streets and East River, Astoria, Queens (Astoria Athletic Field). In The Bronx a plot of land in Crotona Park was assigned by the Park Department to the Board of Education for the Crotona Athletic Field. The work of erecting a grandstand has been completed at the Curtis

Field, is nearly completed at the Astoria Field, and is well advanced at the Crotona Field. All of the athletic fields, with the exception of the one last named, have been in active use for some time. The cost of the athletic fields with their equipment was $369,029.08, leaving a balance of $130,970.92.

The Third Biennial School Census was taken in October, 1906, showing 953,485 children between the ages of five and eighteen, of whom 557,368 attended public schools and 131,044 other than public schools; the number of truants reported was only 411.

DEPARTMENT OF BRIDGES.

Municipal Office Building.

I regard the erection of the new municipal office building, which is part of the general scheme of extension of the Manhattan terminal of the Brooklyn Bridge, as one of the most important projects the City has ever undertaken. This building is to cost approximately $8,000,000 and when completed will house almost all of the City departments. The various departments which it has been decided to place in this building are to-day paying $453,593.46 annual rental. Not only will this rental be saved each year but it is calculated that ample accommodation will be found in the building for many of the principal courts. It is too early to say just how large a saving will be accomplished, but it may be possible to care for so many of the courts that the construction of a new court-house will be unnecessary.

The Commissioner of Bridges, under chapter 670, Laws of 1907, was authorized, subject to the approval of the Board of Estimate and Apportionment, to provide for the erection of the municipal building upon land already acquired for the extension of the Manhattan terminal of the Brooklyn Bridge. In my annual message to your Honorable Board two years ago I recommended that all architectural work outside of the minor work of City departments, be awarded after

NEW MUNICIPAL BUILDING.

As it will appear from Chambers Street, west of Broadway.

McKim, Mead & White, Architects.

competition, the contestants to select their own juries. This plan was followed with most satisfactory results in the case of the municipal building.

On December 12, 1907, the conditions governing the competition were issued to the competitors. These conditions required the design of an office building, not less than twenty stories high, to be located on the plot of land, included in the blocks bounded by Park row, Duane street, Centre street and Tryon row, Chambers street, from Park row to Centre street, passing through the building.

Twelve designs were submitted by the competitors on April 15, 1908. These designs were carefully reviewed by the jury already selected by the competitors themselves. Early in May the jury selected the design of McKim, Mead & White.

The design selected is for a twenty-five-story building, surmounted by a tower ten stories in height. The total height of the building, including the tower, will be 559 feet, the third highest office building in the City.

Immediately after the selection of the architect the development of detail plans was begun. On May 22 the Board of Estimate authorized an issue of $2,700,000 of Corporate Stock to defray the cost of the foundations of the building and to pay the architects' fees.

The general plans of the building were approved by the Art Commission June 17. By October 16 the plans, specifications and a form of contract for the foundations had been prepared in detail and approved by the Board of Estimate, and on November 12, bids for the construction of the foundations of the building were advertised for. These bids were opened on December 3 and a contract subsequently awarded.

The plans for the building proper are being rapidly developed and it is expected to let a contract for the steel frame, shell, and all the plumbing and piping of the building in the spring.

The Brooklyn Bridge.

Since 1904 there has been a steady increase in both the trolley and elevated railroad service on this bridge. The growth in the capacity of the trolley service since 1903 is shown by a day's record in each of the years from 1903 to 1908, inclusive:

	1903	1904	1905	1906	1907	1908
Cars.....	3,807	3,840	3,972	3,995	4,295	4,332

During this period the number of trolley cars operated across the bridge during the rush hours has been increased from 220 an hour in 1904, to as high as 347 an hour in 1908. As the result of the construction of a steel viaduct across Sands street, Brooklyn, which was put in operation on September 28 last, the running time of trolley cars across the bridge has been cut down 33 per cent.

The work of extending the Manhattan station across Park row to secure greater train accommodation, was started in 1907. On January 27 last, the operation of through elevated railroad trains at all hours of the day was begun, and six-car trains have since been operated during the morning and evening rush hours. The consequent retirement of the bridge local trains has eliminated the change of cars and stair-climbing at the Brooklyn end, and the crush and congestion during the evening rush hours at the Park Row station.

We are now operating 366 cars each rush hour in the elevated service, as against a limit of 268 cars an hour in 1905. Seven platforms are now used in loading and unloading in place of the single one used in 1905, while the operation of trains is safeguarded by the most improved electric signal system known. It was distinctly understood at the time of the erection of this temporary terminal that it was to be removed as soon as the subway loop was completed, and this understanding still holds.

HENRY HUDSON MEMORIAL BRIDGE.

Warren & Wetmore, Architects

HENRY HUDSON BRIDGE.

Warren & Wetmore, Architects.

MANHATTAN BRIDGE.

Towers and completed footbridges.

MANHATTAN BRIDGE—BROOKLYN ANCHORAGE.

The Williamsburgh Bridge.

On January 1, 1904, neither the elevated nor surface car tracks had been laid on the Williamsburgh Bridge, although the bridge had been officially declared open. Contracts were at once made for this purpose, and traffic agreements were entered into with the Brooklyn companies for the operation of cars on the southerly tracks to the station in New York, and with the New York Company for the operation of cars on the northerly tracks to the Plaza at the Brooklyn end.

On November 3, 1904, the Brooklyn cars commenced operation, and on February 9, 1905, the Fourteenth Street and Eighth Street lines of the New York Company were started, followed by the Grand Street line on November 28, 1905, the Fourth Avenue line on January 28, 1907, and the Post Office line on June 7, 1908. On June 30, 1906, the Manhattan terminal of the Brooklyn trolley lines was increased to double its original capacity, and on May 18, 1908, the new subway station, containing eight loops, was opened. This subway station was started and completed during the present administration.

The growth of traffic on this bridge is shown by the fact that the daily average for both ways in 1905 was 105,182 passengers, while during 1908 it was 177,736. Of this latter number, 45,413 were daily carried on the elevated railroad, trains over which were first run on September 16 last, on the opening of the Subway station at the Manhattan end, now used for both trolley and elevated trains.

With the improvements now completed and available, the bridge can take care of a traffic of 125,000 people an hour in one direction on its elevated and surface car tracks. The traffic now carried during an entire day could almost be transported either way over the bridge in a single hour with the capacity put to its full use. The Subway station furnished accommodations for eight car elevated railroad trains. It has eight trolley loops, with separate entrances and exits to each of the trolley lines and elevated railroad platforms. It is a

durable structure and the most commodious of its kind in the country. It has been designed so as to form a part of any subway system connecting with or using the bridge as a part of its route.

The Queensboro Bridge.

This bridge will certainly be opened early this year. The contract for the superstructure was let in November, 1903. It called for a cantilever bridge with a roadway and four trolley tracks on the lower deck, and two elevated tracks and two foot walks on the upper deck. In December, 1904, the contract was changed to provide for four tracks on the upper deck.

After the collapse of the Quebec bridge, also a cantilever bridge, questions were raised in the engineering profession as to whether cantilever bridges were being built with a proper margin of safety. The subject was freely discussed in the public prints, and the Bridge Commissioner, with my approval, retained William H. Burr and Boller & Hodge, to make reports on all features pertaining to the Queensboro Bridge. The reports have been made public and as a result of them, it is deemed expedient to use but two of the tracks on the upper deck. This has made necessary certain changes and the bridge, when opened, will have the same capacity as the Williamsburgh Bridge, 125,000 passengers an hour.

The bridge will immediately be of great public benefit. It will be the gateway through which the farmers of Long Island will bring their produce to the markets of Manhattan, and will also open a thoroughfare for the merchants of Manhattan to send their wares to Long Island. Freight from all parts of the country will be delivered to Manhattan from the Sunnyside Yard of the Pennsylvania Railroad, which is at the Long Island City terminus of the bridge. The bridge will probably be used to as great, and probably greater extent for automobile traffic than any other like thoroughfare in the

BROOKLYN BRIDGE.

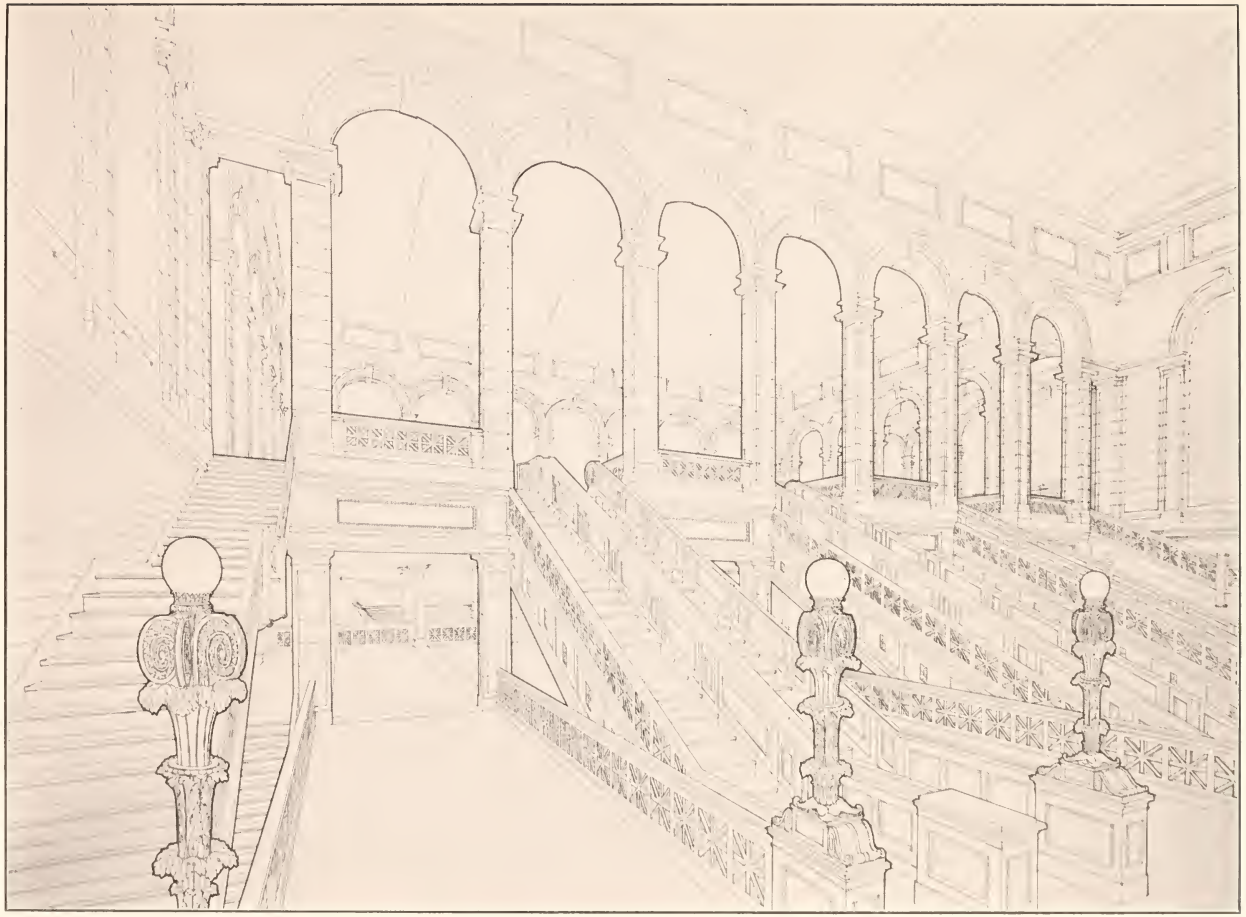
BROOKLYN BRIDGE.

(Showing temporary extension of Manhattan Station and relation of Subway, surface and elevated lines.)

MANHATTAN ENTRANCE, BROOKLYN BRIDGE.

To supersede the present temporary structure.

Hoppin, Koen & Huntington, Architects.



BROOKLYN BRIDGE ENTRANCE.

Interior of proposed station for Manhattan, showing escalators from street level to track floor.

Hoppin, Koen & Huntington, Architects.

WILLIAMSBURGH BRIDGE.

MANHATTAN ENTRANCE, WILLIAMSBURGH BRIDGE.

QUEENSBORO BRIDGE.

View showing centre of West Channel Span, main approach.

QUEENSBORO BRIDGE.

(Blackwell's Island.)

world. I expect the manufacturing industries of Queens to be greatly benefited by the opening of the bridge, as a considerable portion of the vast undeveloped area of the Borough of Queens, convenient to the bridge, is particularly adaptable to manufacturing enterprises.

The Manhattan Bridge.

This bridge, it is now believed, will be completed late in 1909 or early in 1910. Litigation held up the contract for the steel superstructure from 1901 to 1906. In June of the latter year, however, the contract was entered into, and of the 25,000,000 pounds of steel required for the towers, all but 600,000 pounds have been erected. All of the 37,888 wires required in the four cables have been taken from tower to tower and assembled into completed strands. The cables will be fully completed early this year.

The 38,000,000 pounds of steel required for the suspended spans has been manufactured and delivered. The erection of this steel is now under way, and the construction of the approaches is progressing rapidly.

Studies have been made for terminals for the bridge, but the Bridge Department cannot definitely complete the plans until the Public Service Commission and the Board of Estimate determine how the transit facilities for the bridge are to be used.

The bridge will provide for four railway tracks on the lower or roadway floor, and four railway tracks over these on the upper deck. There will be a roadway for vehicles on the lower floor about 35 feet wide, and two footwalks on the same level. With the bridge used to its fullest capacity for railroad traffic, it will be possible to carry across 175,000 passengers per hour each way.

The Henry Hudson Memorial Bridge.

This bridge, the plans and specifications for which are in course of preparation, will be a reinforced concrete structure about 3,000

feet in length. An arch, having a clear span of 703 feet, will form the central part of the bridge. This span will be over twice as long as any other masonry span ever constructed. It will have a clear height of 183 feet above high water.

This bridge, with its open roadway and 80-foot wide walks, and its lower deck with four tracks suitable for either heavy trains or trolley cars, will lend itself to any scheme of transportation development, without impairing the beauty of the architectural effect which has been attained in the design. It is proposed to lay out parks and parkways as approaches and embellishments to the structure. It is also intended to extend Riverside Drive to connect with the bridge, and in this way with the extensive parkway system of The Bronx.

Other Bridges.

In the enthusiasm over the completion of the great bridges across the East River, we are apt to overlook the large number of smaller bridges which have been built during the past five years across the City's navigable streams. These bridges, however, are not only of great importance to the sections in which they are located, but to the entire City.

The Vernon Avenue bridge over Newtown Creek, connecting Manhattan Avenue, Brooklyn, with Vernon Avenue, Queens, was opened in 1905. It is one of the largest Bascule bridges in the country, its double leaf lifts, having a water span of 172 feet. It is 1,699 feet long and 40 feet wide, has a double railroad track, two sidewalks, each eight feet wide, and cost $1,250,000. It is electrically operated and can be opened and closed in 90 seconds.

The bridge has been a great factor in the development of this section of the City. The pedestrian travel is in excess of that over either the Brooklyn or Williamsburgh bridges, and at the present time approximately 2,500 vehicles, not including trolley cars, cross the bridge

each day. When the Pennsylvania Railroad tunnels are completed and the Sunnyside Yard development finished, this bridge will be the direct means of access to them from Brooklyn.

The Flushing Bridge, across Flushing Creek, opened in 1906, is also destined to play an important part in the development of Queens, as it is on the main line of travel between the Queensboro Bridge and all points on the north shore of Long Island. It was designed with a view to accommodating the large volume of traffic which will find its way over the Queensboro Bridge.

In May last a new bridge across Dutch Kills, known as the Borden Avenue Bridge, was opened. This bridge also is on the main line of travel between the Queensboro Bridge and the roadway system of Long Island. The section contiguous to this bridge is being rapidly developed.

The Ship Canal Bridge, which carries Broadway across the canal at Two Hundred and Twenty-second Street, was reconstructed and open for traffic in January, 1905.

The University Heights Bridge across the Harlem River, connecting the University Heights section of The Bronx with Manhattan, was opened for traffic just a year ago. It is an important feature of the development of this section of the City, as the Manhattan approach practically runs up to the Two Hundred and Seventh Street station of the Broadway branch of the Manhattan-Brooklyn Subway system.

The new Pelham Bay Bridge over Eastchester Bay, was opened in October last, and is of general value to the community, as it is along the Eastern Boulevard, which joins the Boston Post Road at New Rochelle, from which point begins the main line of travel to New England.

A new bridge across the Harlem River, connecting One Hundred and Forty-fifth Street, Manhattan, with One Hundred and Forty-ninth Street, Bronx, was opened in August, 1905.

In March, 1905, four new bascule, or lift bridges were opened across Gowanus Canal, Brooklyn, one at Hamilton Avenue, one at Ninth Street, one at Third Street and one at Union Street.

A new Madison Avenue Bridge is now in course of construction across the Harlem River at One Hundred and Thirty-eighth Street. Two sets of railroad tracks will be placed on the roadway of this bridge.

DEPARTMENT OF CORRECTION.

The New Penitentiary.

More than two-thirds of the corporate stock authorized for the Department of Correction during this administration will go toward the construction of the new penitentiary on Riker's Island. It will provide for 2,000 men and 500 women prisoners, and will be the largest institution of its kind in this country. The concrete prison wall, twenty-eight feet high, will inclose nearly twenty acres, covering nearly all the north end of the original island. The architects spent a year in the study of the best designed and best conducted prisons of America and Europe, and it is believed that the result will represent the highest type of prison that the science of criminology has developed. Every provision for the keeping of discipline and health has been considered.

The men's prison consists of four wings placed in the form of a cross, of which the intersection is the central guardhouse. The wings are oriented in such a manner that each side of each wing is exposed to the sun at some time in the day, and a free circulation of air is assured. Each wing is composed of four tiers of cells, and each tier contains two parallel ranges of sixty-two cells, separated by a utility corridor. In front of the cells a gallery five feet wide, for the use of prisoners, is enclosed in a burglar-proof steel grating, and outside of this is an open gallery for the guards.

NEW PENITENTIARY ON RIKER'S ISLAND.

Trowbridge & Livingston, Architects.

All the cell doors are controlled at one point at the head of each cell wing, in such a manner that all the doors or any one door or group of doors may be opened and closed at will by a single guard.

The mess hall is 125 by 100 feet under one roof, without columns or other obstructions to the view of the guard, and is capable of seating 2,000 prisoners at one time.

The workshops have been designed upon the most modern principles, the architects having studied the buildings of the great industrial plants of this country. Each shop is placed with its main axis north and south, so as to secure sunlight and air at all times during the day. Electric power will be supplied to the shops from the central power plant.

The prison for women is similar in principle to that for men, except that the chapel will be placed above the mess hall. There will be separate hospitals for men and women.

Riker's Island, by its location, assures to the penitentiary the most perfect hygienic conditions. The plan of the prison buildings will fully meet the two essential requirements of health and of economic supervision and control. The City of New York will have, not only the largest, but the most perfect institution for the care and cure of criminals.

The prison will cost $2,250,000.

DOCKS AND FERRIES.

Before the close of the year 1909 it is expected that the great transatlantic lines will move from their present piers and be concentrated in the half mile of water front extending south from West Twenty-third Street on the North River, and known as the Chelsea Section. The lines which will be accommodated within this section include the Cunard Steamship Company, the Compagnie Generale

Transatlantique, together with the lines of the International Mercantile Marine, viz., White Star, Red Star, American and Atlantic Transport Lines. These rentals will increase the City's revenue $560,000 a year. The piers which these companies will vacate have been leased at rentals which will accrue to the City an advance of $93,327 per annum over the rental now paid. Along the Chelsea Section a marginal street 250 feet wide has been made, and at the north end, at the foot of West Twenty-third street, a magnificent wide approach has been completed leading to the ferries of the Central Railroad Company of New Jersey, Delaware, Lackawanna and Western Railroad Company, the Erie Railroad Company and the Pennsylvania Railroad Company. These railroad companies have improved the property leased to them by the City by building an entire new system of ferry slips and ferry houses, containing eight slips and covering about 1,000 feet. An effort was made to secure the consent of the Secretary of War to an extension of the pierhead line north of West Twenty-fourth Street, which would have made it possible to increase the length of piers to 800 feet. This request was not granted.

The Brooklyn water front from Twenty-eighth Street to Thirty-sixth Street has been bought by the City, and plans have been prepared for eight modern steamship piers which will be the largest in the City, the smallest being about 1,200 feet long, and the longest being about 1,800 feet. (The longest pier in the Chelsea Section is 825 feet). The preliminary work of dredging for these piers has been contracted for and is now in progress, and the channel now being dredged to a depth of forty feet by the United States Government in front of these piers, will give convenient access thereto and provide accommodation for the largest steamers now afloat or contemplated. In addition, 422 feet of water front has been purchased between Fifty-ninth and Sixty-first Streets, South Brooklyn, for development for commercial use.

THE CHELSEA IMPROVEMENT.

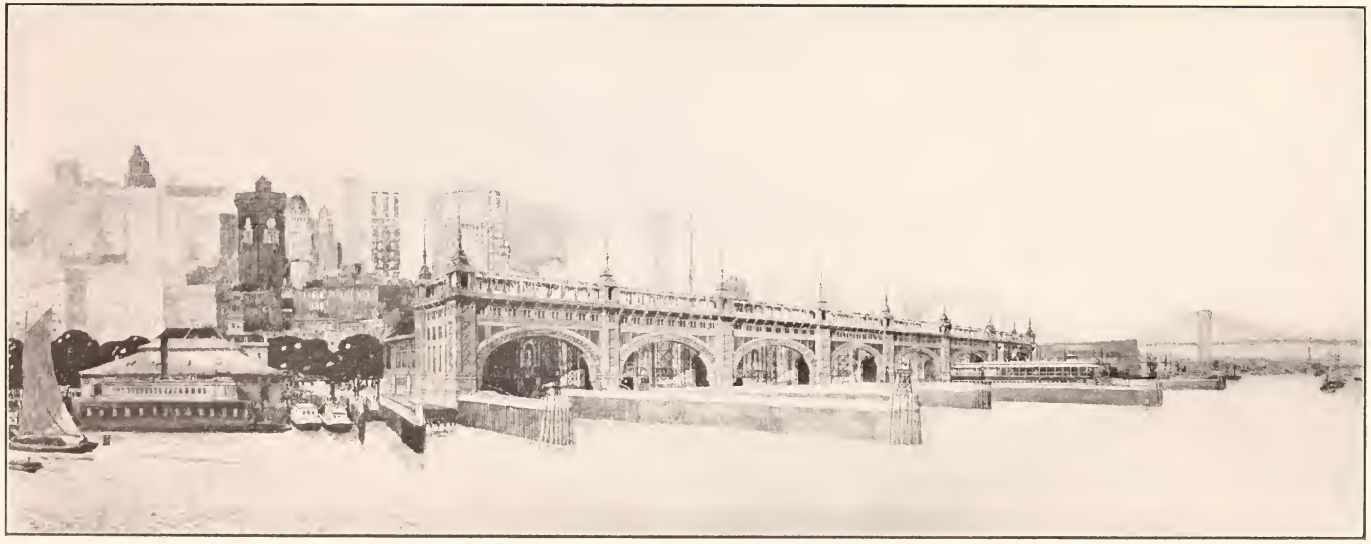
From Twelfth to Twenty-third Street, North River.

Warren & Wetmore, Architects.

THE CHELSEA IMPROVEMENT.

Pier Entrances, Marginal Street.

Warren & Wetmore, Architects



WHITEHALL FERRY TERMINAL.

Walker & Morris, Architects

MUNICIPAL FERRY SERVICE.

The Bay Ridge, one of the new South Brooklyn boats.

MUNICIPAL FERRYBOAT QUEENS,

In service on the Staten Island line.

In conjunction with the Department of Highways, an exterior street has been begun between Sixty-fourth and Eighty-first Streets, East River, a distance of 4,606 feet, of which 812 feet of the sea wall is complete and in use. This improvement will permit the use of the water front between these points now cut off by the bluffs on the banks of the river, and outlets will be provided at various streets so as to make it readily accessible for vehicles.

The work of building the new sea wall between Twenty-eighth and Twenty-ninth Streets, East River, and the filling in in the rear thereof is being advanced rapidly. It is expected that in the Fall of 1909 the entire new area thus made will be turned over to the authorities for the extensive improvements contemplated for the Bellevue and Allied Hospitals.

About 8,800 feet of wall has been built around the easterly end of Riker's Island, forming a basin within which the Department of Street Cleaning is depositing the City's refuse. When this filling is completed, about 150 acres of made land belonging to the City will be available for use.

At North Brother Island about 1,900 feet of concrete retaining wall has been built, in the rear of which it is intended to deposit filling in a manner similar to that at Riker's Island. These four acres of made land is designed for the use of the Department of Health.

A lease has been made to the Central Railroad of New Jersey of land under water easterly of Third Avenue in the Borough of the Bronx for a freight terminal. At this end of the Harlem River are now clustered the freight yards of the Pennsylvania Railroad Company, the New York Central and Hudson River Railroad Company, the Erie Railroad Company, the New York, New Haven and Hartford Railroad Company, the Lehigh Valley Railroad Company and the Central Railroad Company of New Jersey, part of which are located upon private property and part leased from the City. The

Department has recommended that Congress be asked to provide a navigable channel commencing at a point about opposite One Hundred and Twenty-fifth Street, Harlem River, and extending along the northerly side of Randall's Island. At the present time this passage is not navigable, but if this improvement could be effected, a shorter route will be furnished to vessels plying between the Hudson and Harlem Rivers and Long Island Sound, and the probabilities of disaster in the vicinity of Hell Gate would be lessened by affording vessels a direct instead of a circuitous route around Ward's Island, where strong currents are encountered. This would also save a distance of three and one-half miles, to say nothing of lessening the congestion at the freight terminals in the lower part of Manhattan Island.

Five new ferryboats have been built for the Staten Island Ferry service, at a cost of $1,750,000, the boats being named after the five Boroughs comprising Greater New York. For the service to Thirty-ninth Street, Brooklyn, three ferryboats were constructed, the "Gowanus," "Nassau" and "Bay Ridge," and plans for three more ferryboats to be used in the extension of the Municipal Ferry service are being prepared.

The dilapidated ferry structures at the Manhattan end of the old Staten Island Ferry have been removed and two new ferry slips with a temporary waiting room completed. The permanent ferry house, which will cost about $464,000, was begun in August last. It is designed to form a part of a uniform structure extending from the Governor's Island Ferry slip to Broad Street, a distance of 627 feet. This house will be a notable addition to the public buildings of the City, and is so designed as to provide a ferry terminal with a recreation structure on the roof for public use. Three new ferry slips at the St. George terminal, begun in 1905, were, together with the steam railroad terminal and the trolley line platform, finished in 1907 at a cost

of about $583,000. The new permanent ferry house, consisting of a two-story structure with an extensive concourse and unloading platform, has been built at a cost of about $600,000, and, in conjunction with the President of the Borough of Richmond, a road is being built from the ferry to Jay Street, St. George. This will overcome the grade now encountered in reaching the street system of Staten Island from the ferry terminal.

In consequence of its isolated location, a comprehensive high pressure salt water fire service, operated with electric turbine pumps, has been installed, affording protection to the terminal platforms.

At the foot of Canal Street, Stapleton, a new ferry slip with appurtenant platforms has been built, a temporary ferry house erected and plans for a permanent ferry house prepared.

Between Whitehall and Broad Streets—the site of the old Thirty-ninth Street Ferry—three new ferry slips have been built and a permanent ferry house, which will cost about $648,000, is well advanced to completion. At the Brooklyn terminal ferry structures with two slips have been finished. As a more expeditious service is expected in the case of the operation of ferries by the City, it was found necessary to place the structures a considerable distance outshore from the old location; and the scarcity of material suitable for filling-in purposes, together with the failure of the Brooklyn Rapid Transit Company to extend its service outshore, has been the cause of much complaint among the patrons of this ferry. Recently the railroad company has been urged to use the track siding on the north side of the ferry premises so as to bring passengers nearer the ferry house, and the question of extending the tracks on a loop in front of the new ferry building when the filling-in is completed has been taken up.

The receipts of the Staten Island Ferry under municipal operation, as compared with the last year of its private ownership, showed

an increase of 24 per cent., and in the case of the South Brooklyn Ferry an increase of 18 per cent. The receipts of the Staten Island Ferry for 1907, as compared with 1906, show an increase of $59,000, while the receipts from the South Brooklyn Ferry for the year 1907, as compared with 1906, show an increase of $29,642.49. On the other hand, the expenses for the year 1908, it is estimated, will be considerably less than 1907, for the operation and maintenance of both ferries.

Eight recreation piers, with music, are open each summer. Last May the Cedar Street promenade was opened to the public. This is the first attempt in this City to utilize the roofs of the sheds along the bulkheads for this purpose, and the experiment has proven a great success. This promenade extends along the northerly water front from Cedar to Albany Streets, and was much used during the hot summer nights by the residents in the lower section of the City.

The total new wharfage room made during the past five years has been about 207,000 linear feet, or about thirty-five miles, increasing the area of the piers about three million square feet, including the construction of fifty-one piers and twenty-one new platforms, and the building of extensions for thirty piers.

Many improvements in the method of construction for the protection of water front structures against fire have been adopted. Reenforced concrete decks on piers replace wooden decks; manholes in the piers admit firemen beneath piers and platform structures, and a sprinkler system is placed under the decks of the piers so that the under structure can be drenched with water in less than one minute after connections are made either by fire boats alongside the pier or by engines at the land end.

DEPARTMENT OF STREET CLEANING.

The generally accepted view that the expenses of a department should not increase at a greater rate than the population of the city, cannot fairly be applied to this Department. The expansion of the work since 1904 has been in two directions; first, in providing for the needs of a greater number of people, and second, in meeting the requirements of a great deal of additional territory and a much greater street length. The report of the Commissioner of Street Cleaning shows clearly that the different items of work, taken collectively, have increased at a much greater rate than the population.

Under the head of additional work I call your attention to the cleaning of paved streets of Manhattan, formerly cleaned by the Department of Parks, and some eighty-seven miles of macadamized streets in Brooklyn, formerly under the control of the Borough Administration. These, and many similar items, show that the increase of expense in this Department does not depend alone on the increase in population.

On January 1, 1904, the Department had under its care 971.1 miles of streets. During the year this mileage was increased to 998.7. To-day the mileage of streets to be cleaned is 1,216, an increase of 25 per cent. In 1904 the amount of material collected was 5,945,390 cubic yards. The amount of material collected during 1908 was approximately 7,578,814 cubic yards, an increase of 27.5 per cent. The total expense of the Department, working accounts only, in 1904, was $5,441,917.66. Including snow and ice removal the expense was $7,231,933.74. In 1908 the expense, working accounts only, was $6,912,856.19. The total expense, including snow, ice and new equipment, was $7,536,948.69. The cost per capita, based on the expenses of Department work, was $1.495 in 1904, and is estimated at $1.677 for 1908. The cost per capita on total expense has, however, dropped from $1.987, in 1904, to $1.832 in 1908.

The cost of snow removal fluctuates, of course, from year to year. The "area" system, which had been in use since 1902, was discontinued last year, and a system of actual measurement substituted. The result was a very considerable saving to the City. The difference in expense as compared to 1907, was close to $2,000,000, part of which was, of course, due to the fact that less snow fell. It is estimated, however, that had the quantity been the same as in 1907, the net saving would have been a trifle over $1,250,000. During 1903-1904 the length of street from which snow and ice were removed was 241 miles. In 1907-1908 the snow schedule was increased to 470.624 miles in accordance with the recommendation of the Special Commission I appointed to investigate the subject.

Notwithstanding the increased work done by the Department, there is a constant public demand for continued extension of the service. While collectively, civic bodies criticise the expense of street cleaning, individually they make demands which, if complied with, would call for a far greater expenditure.

Riker's Island.

During the past five years a very considerable addition has been made to the area of Riker's Island, by utilizing the ash collections to as great an extent as possible. The original acreage of the island, when acquired by the City, was 89; to this 63 acres have been added, and 144 additional acres are to be made in this manner. The total future area of the island will be 295 acres, much of which will be used in connection with the new penitentiary.

POLICE ADMINISTRATION.

A comparison of arrests and convictions by the police attached to the detective bureau during the first nine months of 1907 and 1908 indicates that much better results are obtained since the reorganization of the bureau. The number of arrests increased from 7,927 to 12,704 and the convictions increased from 1,422 to 4,516, showing 35 per cent. of convictions in 1908 as against 18 per cent. in 1907.

In the same period the fines increased from $4,201 to $21,418, the total years' sentences from 1,822 to 4,559, and the amount of property recovered from $185,342 to $420,959.

Branches of the bureau have been established in various parts of the city, adding greatly to the efficiency of detective work.

The five-platoon system gives excellent results. It serves the public better than the three-platoon system and the men prefer it to the two-platoon system.

At headquarters important reforms have been accomplished in the way of reorganizing the detective bureau, the telegraph bureau and the bureau of repairs and supplies, and in systematizing the department records. The Book of Rules, upon which all police work is founded, has been rearranged and entirely rewritten. The docket of charges against policemen has been cleared. Some of the cases were eight years old. An investigation of the special patrolmen permitted by the Charter has resulted in the dismissal of many undesirable men and applications are now granted under more rigid rules.

This year there will be one member of the active police force to each 434 inhabitants, at a cost of $3.26 per head of population. The average cost per head of population for the four years beginning January 1, 1906, is $3.20, but in 1906 and 1907 there was but one member of the active force for each 456 inhabitants. The cost per head of population for the active police available to patrol has been

reduced to $3.12, as compared with $3.15 in 1906, $3.10 in 1907, and $3.23 in 1908. There are 1,814 men and 1,232 women and children on the pension roll and the average yearly cost of these to the City is $515.28 each, or 36 cents per head of population for all.

The present Police Commissioner has reduced from 2,000 to 1,200 the number of men detailed away from regular police duty. The abolition of the details which still remain would strengthen the department in the line of more active police duty but would, of course, add to the expense of other departments where police details have been used for many years. Civilian employees should be substituted wherever they will be of equal use and whenever economic arrangements will permit of it.

In five years the department has been increased by four chaplains, two surgeons, three inspectors, four captains, seventy-five sergeants (formerly roundsmen), 1,207 patrolmen and five doormen. Legislation was obtained giving to the Commissioner more disciplinary authority over police inspectors.

The new headquarters building at Grand and Centre streets is nearly finished and will be occupied this year. The West Thirtieth street station, which is considered the best type of police station in the United States, is in use and plans have been made for four other new stations.

The records of men eligible for appointment to the force are carefully examined. A new system of instruction for recruits is nearly ready for use.

REGULATION OF TRAFFIC.

Five years of effort have brought the regulation of traffic from the experimental stage to a condition which calls for little improvement. In this important branch of police work New York has now surpassed the foreign cities which had been considered the leaders. It adds to the credit of the various men who have bettered the system when it is re-

NEW POLICE HEADQUARTERS,

Centre, Grand, Broome and Baxter Streets.

Hoppin, Koen & Huntington, Architects

NEW POLICE HEADQUARTERS,

As it now appears.

Hoppin, Koen & Huntington, Architects.

WEST THIRTIETH STREET POLICE STATION.

Considered the best type of station-house in this country.

R. Thomas Short, Architect.

ONE HUNDRED AND SEVENTY-FIRST PRECINCT POLICE STATION.

Eighty-sixth Street and Fifth Avenue, Brooklyn.

membered that New York's topography makes its traffic regulation a very difficult problem. But the problem has been solved, with the resultant saving of many lives and much money.

On January 1, 1904, the entire force engaged in the regulation of traffic consisted of 118 men, composed of 1 captain, 1 lieutenant, 5 sergeants and 111 patrolmen. One sergeant was mounted, and of the patrolmen, 5 were mounted and 2 assigned to bicycle duty.

On August 1, 1904, the then Police Commissioner established the street traffic regulation bureau, with headquarters at City Hall and two sub-stations, one at No. 1 East Twenty-seventh Street and the other at Borough Hall, Brooklyn. He increased the traffic force to 246 men, 85 of whom were mounted. Of these, 16 mounted men and 20 foot men, including officers, were assigned to Brooklyn. A force of 663 men is now assigned to traffic duty. Of this number, 502 are on foot, 140 are mounted, and 21 are on bicycles. These men are in charge of 1 inspector, 1 captain, 28 lieutenants and 24 sergeants. The entire squad is known as the Fourteenth Inspection District, and is divided into four precincts.

Traffic regulations are now in force until midnight at Herald Square, Times Square, Columbus Circle and at the intersection of Seventy-second Street, Broadway and Amsterdam Avenue, where formerly the regulation of traffic ceased at 6.30 p. m. The importance of the regulation of traffic at these congested points at night is clearly shown by the number of requests for similar regulation which the Department receives from congested points further north. When the necessary men to cover these other congested points, instance One Hundred and Twenty-fifth Street and Eighth Avenue, can be spared for traffic duty the regulation will be extended uptown.

In the hotel and theatre district north of Twenty-third Street and at points such as the Grand Central Station, many traffic posts are now covered until 9 p. m.

WIDENING OF FIFTH AVENUE.

The process of widening Fifth Avenue, an improvement absolutely necessary to relieve congestion, has been slow, not because of legal or engineering phases, but because the administration has considered it only fair to give to the property owners and tenants of the avenue every reasonable opportunity to prepare for what may be, to some of them, a radical change. The avenue has been widened fifteen feet between Fortieth and Forty-second Street, and the relief to traffic is so evident that steps should be taken this year to widen the roadway from Twenty-sixth Street as far north as the present congestion exists.

I believe that a further great improvement for the relief of traffic would be a depression of the roadway of Forty-second Street at Fifth Avenue, so as to carry east and west-bound street cars and other traffic under the Avenue at this point. This, as I pointed out a year ago, would leave north and south traffic practically unimpeded, an advantage which must be apparent to all familiar with conditions at the intersection of the two great streets.

SUPERVISION OF TAXIMETERS.

I respectfully suggest to your honorable body the adoption of an ordinance requiring taximeters to be tested by the City. Within a year it has become evident that the taximeter, with its supposedly exact measurement of distance and time, is a popular appendix of public vehicles. It is, however, as subject to error as any other mechanical device and should be inspected as are weights and measures.

A system of test is used in some European cities and it seems time that New York adopted means to protect users of cabs from overcharge through design or accident.

PROPOSED SUBWAY IN FORTY-SECOND STREET, AT FIFTH AVENUE.

AUTOMOBILES.

I beg to call the attention of your honorable body to the following extract from my message of last year:

"There is no general ordinance in existence at the present time which specifically applies to the licensing of public automobiles. Under an order of the Supreme Court the Bureau of Licenses is now issuing licenses to such vehicles under the general ordinance relating to public hacks and cabs. This ordinance, however, was never intended, in my opinion, to apply to automobiles, and fails to regulate their charges in proper fashion. I recommend, therefore, the adoption of an ordinance which will apply directly to these vehicles. At the same time, I believe that some provision should be made for licensing all sightseeing automobiles, which, at present, pay no fee whatsoever to the City.

"In this connection, I also desire to call your attention to the necessity of preventing the use of sirens upon all automobiles other than those of the Fire Department within the City limits. The siren has been adopted as the particular signal of the approach of the apparatus and officials of the Fire Department, and its indiscriminate use by others results in confusion of traffic, which necessarily detracts from the value of such signal to the Fire Department. I have caused such an ordinance to be prepared for introduction in your Board, and trust that it will receive your favorable consideration.

"I think it also most important that the following regulations should be adopted in regard to the use of all automobiles, both public and private, within the City:

"First—That all automobiles should be equipped with adequate mufflers, which never should be cut out within the limits of the built-up portions of the City.

"Second—That, except for the first ten seconds after starting the engines of an automobile, no smoke should be allowed to come out

of the exhaust pipe. It is wholly unnecessary and is simply an evidence of carelessness and incompetence.

" Third—That the use of acetylene headlights within the built-up portions of the City should be prohibited. The use of these lights is very dangerous and has resulted in causing many accidents by dazzling pedestrians and drivers of vehicles coming in the opposite direction. These lights are unnecessary on the City street, and I understand that responsible drivers, of their own volition, refuse to use them."

BUREAU OF WEIGHTS AND MEASURES.

This bureau was established as a branch of the Mayor's office in 1904. Active operations were begun in January, 1905, since which time 153,546 places have been visited for purposes of inspection. The following table summarizes the work done:

Number of instruments tested	1,100,133
Number of instruments condemned	9,983
Number of complaints lodged against users of incorrect instruments by inspection staff	8,853
Aggregate amount of penalties involved in the above number of violations	$202,260

The Bureau undertook to stop the sale of short weight coal loads and the weighing of ice by fraudulent scales in the year 1906. Prior to this no such step had ever been taken. There was bitter opposition to this work, but the action of the bureau was fully sustained by the courts.

Summary of Coal Re-weighing.

Number of loads re-weighed	1,890
Number of tons contained therein	3,017
Number of loads found short	250

The worst fraud detected in this inspection was an attempted delivery of a load 2,320 pounds short on four tons.

The efforts of the bureau to stamp out the practice of selling short weight ice has resulted in the condemnation of about 500 fraudulent scales.

In addition to the routine inspection in stores, the large scales of the different Federal and City departments have been tested. These tests, many of which proved the scales to be incorrect, insure the departments against short weight. I call your attention to the amendments to the ordinance creating this bureau, which have been presented to you, and which should be, in my opinion, adopted at once. The present ordinance is inadequate, as it fails to properly safeguard purchasers of package goods from short weight or measure. The adoption of the amendments now in your hands will provide more protection to the purchasing public.

CONTROL OF EMPLOYMENT AGENCIES.

The office of the Commissioner of Licenses has grown in importance since its establishment nearly five years ago. It supervises not only intelligence offices for domestic servants, but labor agencies, shipping agencies, stenographers' bureaus, agencies for supplying technical and clerical positions, theatrical agencies and nurses' registries.

Many of these agencies were not regulated, not even supervised, prior to the creation of this office. The supervision exercised over domestic servants' agencies, especially those on the East Side of Manhattan, was extremely lax, with the result that the extortion practised drew forth many complaints from the public. Immorality flourished among agencies whose principal business was to furnish employment to immigrant girls.

The extortion and immorality complained of have been practically eliminated as a result of the strict system of inspection and regulation to which employment agencies are now subject. The office of the Commissioner of Licenses was not established primarily to collect

revenue by means of license fees, yet the income from licenses has been increased by 80 per cent. a year since the office was created. The annual revenue is now about $20,000 from 800 licensed employment agencies. Heretofore many agencies were conducted without licenses.

Revocation of licenses is the remedy lodged with the Commissioner to ensure compliance with the law. But inasmuch as the revocation of a license means the destruction of an agent's business, the Commissioner is loath to exercise this power, unless the offense is flagrant and the punishment is found, after careful investigation and a legally conducted trial, to be well merited. The number of licenses revoked since 1904 is 103, of which 21 were for immoral practices and 82 for extortion and other violations.

Peonage, in so far as labor agents in New York City are responsible, has been generally eliminated, and the fact that complaints regarding it from various parts of the country have been greatly reduced is in large measure due to the strict supervision of the contract labor agencies here. The evils of the padrone system, so extensive a few years ago, have been reduced to a minimum.

The law governing the various kinds of employment agencies is comprehensive. By a system of intelligent enforcement of this law the evils connected with the agency business have been abolished, and thousands of persons whose sole means of obtaining employment is through these agencies are now afforded all reasonable protection. The office investigates nearly 2,000 complaints a year.

TENEMENT HOUSE CONDITIONS.

From the organization of the Department in January, 1902, to the beginning of the present administration, January 1, 1904, plans were filed for the erection of 1,924 tenements, containing 24,115 apartments, to accommodate about 108,000 persons. From January 1, 1904, to January 1, 1908, plans were filed for 17,836 new tenements,

containing 221,801 apartments, or accommodations for over 930,000 people. This means that during the four years in question nearly one million persons, or one-quarter of the present population of the greater city, were provided with the higher type of housing in respect to light, ventilation and general sanitary condition, required by the present law, and that the fear that the law would restrict the activity of builders, and limit the supply of housing required by the city's growth, is effectually disposed of.

During the above four years a great expansion of building operations was noted, which came to a maximum in 1905, and has since shown a gradual decline. During 1908 the decline has been marked, so that up to November 30, plans have been filed for only 1,725 new buildings, containing 18,950 apartments, or accommodations for about 85,000 persons.

An important phase of the Department's work is the structural alteration of the 80,000 or more tenements already in existence when the law went into operation, to give them in some measure a share in the benefits of the better lighting, ventilation and sanitation required for new buildings.

In 1902 there were more than 9,000 school sinks, privy vaults and latrines found in an incomplete canvass of the City. The efforts of the Department to remove these were delayed by litigation until 1906, but between January 1, 1904, and January 1, 1908, 3,258 school sinks alone were removed and replaced by sanitary closets, one for every two families in each house affected. During the present year to November 30, 1908, 400 of these appliances have been removed and the work of removal is expected to go on with increased activity during the ensuing year, by the aid of increased appropriations granted for that purpose.

Among the other structural changes of the four years are the provision of 42,602 new fire escape balconies, the provision of 4,930 sky-

lights and the cutting of windows in 24,543 dark interior rooms. During the present year to November 30, 5,941 fire escape balconies have been provided and 2,070 skylights, while 12,401 windows have been cut in dark rooms.

The Department is also responsible for the sanitary condition of tenements. It receives from 40,000 to 50,000 complaints each year, mostly with regard to these conditions. About one-half of these are found to require the issuing of violations, and the fact that the number of complaints decreases year by year, indicates a general improvement in conditions. Beside action on complaints, the Department makes a periodic inspection of the lower rental grades of tenements. With the appropriation hitherto available, it has been possible to cover the ground completely once a year. During the coming year it is planned to make two complete sanitary inspections of the city.

METROPOLITAN SEWERAGE COMMISSION.

This Commission was appointed by me under authority given by the Laws of 1906, to succeed the New York Bay Pollution Commission, which had gone out of existence. Up to January last, it had accomplished practically nothing, owing to internal dissensions. I then reorganized the Commission, since which time it has worked harmoniously and with excellent results. The work so far done has been chiefly of an investigating character, and can only be considered as preliminary to a more final and creative work. Nevertheless, two general principles have been established as guides to the disposition of sewage in the Metropolitan District.

First, it is considered unwise to permit sewage in large quantities and unpurified condition to be brought from municipalities not contiguous to our harbor, for disposal. The members of the Commission have appeared before the Commissioner of Health of the State of New York and the State Engineer and Surveyor, in opposi-

tion to the Bronx Valley Sewer project. This plan contemplates carrying the sewage of White Plains, and other inland communities, to the Hudson River, and naturally from there into our harbor.

The Commission also appeared in opposition to the Passaic Valley project, which contemplates the discharge of the sewage of Paterson and about twenty other municipalities in the State of New Jersey, into the upper bay.

The second principle established is that the policy of the City of New York to build sewers to carry both household sewage and street drainage should be modified, and wherever circumstances permit separate sewers be built.

In both of these matters the Commission has the hearty support of the present administration. In pursuance of its work, the Commission has established a laboratory and made many analyses of the solid matter deposited from the waters upon the bottom of New York Harbor. The object of these analyses is to obtain an accurate knowledge of the conditions of the water so as to determine to what extent the sewage produces injurious conditions, and to what extent and under what circumstances, it may be discharged in these waters without injury to the public health. A report dealing with this subject is, I am informed, shortly to be made by the Commission.

With the assistance of the United States Coast and Geodetic Survey, an exhaustive study is being made of the tidal phenomena of New York Harbor, with special reference to the effect of the currents in transporting and disposing of sewage, and systematic inspections have been made to determine the condition of pollution along the extensive water-front of the City and its neighboring municipalities.

COMMISSIONERS OF ACCOUNTS.

With its legal powers of audit and investigation, the office of the Commissioners of Accounts has possibilities not possessed by any other branch of the City Government. During the past two years the powers of the Commissioners have been extensively used and have proved an important factor in the support of efficient administration.

In spite of its powers, the work of the Commission had dropped to a point, two years ago, where it amounted to little more than the perfunctory checking up of department accounts. Its potential power and utility were first brought prominently to notice in connection with an investigation of the office of the President of the Borough of Manhattan, which was ordered by me in December, 1906, on the written request of the Borough President, and as a result of certain charges preferred by the Bureau of Municipal Research. The powers of the Commission were disputed in this instance, and the matter carried to the Court of Appeals, where the contentions of the Commission were fully established.

As the result of this investigation I determined to use the Commissioners of Accounts more extensively in the work of investigating departmental and divisional activities and this plan has been adhered to. To facilitate the work there has been a complete reorganization of the office under Commissioners Mitchell and Gallaher. The efficiency of the office under this reorganization is best shown by the result of the recent investigation of the Bureau of Licenses.

Apart from the mandatory audits of the various revenue receiving departments of the City, the Commissioners have been and are now largely engaged in conducting special investigations. It was with these special investigations in view that authority was given to the Commissioners by the Charter to subpoena witnesses, examine them under oath, and to have produced as evidence the books and papers of persons dealing with the City. Further to aid them in these

investigations, an Engineering Bureau was added to their staff, enabling them to deal with the technical questions arising in every thorough examination of a City Department.

The following are among the special investigations which have been conducted in the last two years or are now under way:

Office of the President of the Borough of Manhattan,
Office of the President of the Borough of The Bronx,
Office of the President of the Borough of Brooklyn,
Office of the President of the Borough of Queens,
Board of Water Supply,
Fire Department,
Bureau of Licenses,
Bureau of Street Openings,
Department of Parks, Bronx,
Department of Street Cleaning,
Bellevue and Allied Hospitals,
Department of Correction,
The Night Court,
Department of Finance, Bureau of Real Estate.

It is proposed this year to complete the investigations of the offices of the Borough Presidents, and to take up one after another the large City Departments. Such periodic examinations, if systematically and thoroughly handled, will not only serve to check incompetence and corruption, if such exist, but will make possible the introduction of methods to prevent the recurrence of the evils that are disclosed. Furthermore, they will be of incalculable value as a means of effective executive control.

REORGANIZATION OF ACCOUNTING METHODS.

I regard the work undertaken by the Comptroller during the past year, with respect to the reorganization of the accounts of the several departments and the simplification and improvement of the methods of the Department of Finance, as of the greatest importance. The necessity for complete revision of the accounting methods of the City was made clear in the report of the Commission appointed by me in 1904. Until last year, however, little or nothing was done in this direction. The Comptroller lacked a sufficient staff to undertake the work, but last year a Bureau of Expert Accountants was established and the work of reorganization is now being prosecuted vigorously.

In this work the Comptroller has had the assistance of Mr. Bruere, of the Bureau of Municipal Research, to whom much of what has been accomplished is due. The service of Mr. Bruere and the Bureau in this purely municipal work marks a new departure in City government, the active co-operation of the public with the City administration.

The plan of accounting reorganization adopted will effect not only uniformity in accounting methods in every branch of the City government and establish central financial control over receipts and disbursements, but will provide information essential to the economical and efficient administration of departmental business. Already, a complete installation has been made in the Departments of Health, Street Cleaning and Bellevue and Allied Hospitals.

Included in this plan of reorganization is a method for controlling the stores of the various departments through the installation of a double entry system of accounts. The prime purpose of the new system is to secure complete and accurate control over the integrity and accuracy of departmental records. When this is done it will be possible to determine, for the first time, the exact expense of conducting each of the activities of any Department. As a means to secur-

ing an intelligent and accurate Budget, no more important step has been taken. By the development of an exact record of expense it will be possible to estimate with close precision the probable necessary expenditures of the succeeding year, and when this is fully accomplished, a greatly increased economy in the conduct of departmental business should be possible.

Every department of the City Government should maintain the most careful supervision of its stores, and receive and disburse no goods without making a record thereof. As a first step in establishing accurate store records, every department head has been directed to take a physical inventory of all goods in stores on hand on January 1. It is clearly to be desired, from a business standpoint, that all property in the custody of the departments shall be scrupulously accounted for.

As a means of carrying into effect the spirit and purpose of the resolution relating to the schedules of positions and salaries accompanying the Budget for 1909, the Comptroller has undertaken the establishment of accurate time records in the departments with respect to employees paid on weekly rolls. These time records will provide a basis for the audit of payrolls which has hitherto been lacking. I have directed every Department responsible to me, as Mayor, to maintain the time records prescribed by the Comptroller. I believe that the information thus produced will show many opportunities for economy.

CONDEMNATION OF LAND FOR CITY PURPOSES.

The existing method of condemning land is and has been for a long time considered by all those who are at all conversant with the subject as indescribably faulty, inefficient and objectionable. The difficulty in suggesting a remedy is largely constitutional. The Constitution of the State of New York, provides, Article I., section 7:

> "When private property shall be taken for any public use, the compensation to be made therefor, when such compensation is not made by the state, shall be ascertained by a jury, or by not less than three commissioners appointed by a court of record, as shall be prescribed by law."

The difficulties in trying such cases before the ordinary jury of twelve, have been looked upon as so manifest that the universal practice has been to resort to the other method of procedure, by Commissioners appointed by the Courts. This method has proved most inefficient in practice, the two principal grounds of objection to this proceeding being, first, as to the amount of the awards; and second, as to the great delay and tremendous expenses involved most unjust both to the property owners and the public.

Under the prevailing system the Commissioners, being quasi judicial officers, have control of their own proceedings, can sit as often or as seldom as they see fit, and grant adjournments whenever they deem proper. The length of time required for any proceeding rests, therefore, with them and is not within the control of the Corporation Counsel, who only acts as counsel for one of the parties in interest. The Commissioners are often not only unfamiliar with real estate values, but also unversed in the rules of evidence as to measure of values and unaccustomed to sifting evidence and that close analysis of testimony necessary to a judicial procedure.

The only really effective remedy must be provided by constitutional amendment which would relegate this branch of litigation to the regular courts of the State exercising equitable jurisdiction where the matters would be decided by a judge sitting without a jury. Such courts could pass upon values very much as it does in applications for injunctions by abutting property owners to restrain the operations of the elevated railroads. Those actions are practically a condemnation proceeding of the easement of light, air and access and this method of

determining the amount of awards has proved very satisfactory. If condemnation proceedings were prosecuted before the courts in this way, sitting as courts of equity, the question of the value of the properties would be passed upon in regular judicial proceedings by judges accustomed to deal with disputed questions and familiar with the rules of evidence and cross examination of witnesses.

The above method is the only real solution of the problem, but it is open to the very plain objection that several years will be required to secure a constitutional amendment.

Another suggested remedy has been something in the nature of condemnation courts, or Commissioners appointed by the Appellate Division or in some other manner, at fixed salaries, to try and determine condemnation cases. There are serious constitutional questions as to some features of this plan, but probably a statute along these lines could be drafted which would not be open to constitutional objections, and such a course would have the advantage of giving prompt relief, although it would, while probably proving more satisfactory than the present system, be open to many of the same objections.

CHARTER REVISION.

Two years ago, in my message to your honorable body, I recommended a revision of the Charter by the City itself. The Legislature saw fit to authorize the appointment by the Governor of a Commission for such revision and, although I opposed the bill, as I have opposed every bill menacing home rule, I have given every possible aid to the Commission. I understand that the Commission, which has been at work all of the last year, will be ready to report to the Legislature early in the present session.

LAW DEPARTMENT.

The number of actions and proceedings of all kinds commenced during 1908 was 39,500, the number disposed of was 30,700, and the number pending at the close of the year, 51,200. Another evidence of the enormous volume of litigation handled is contained in the following record of court work:

Number of actions tried in court	2,900
Number of appeals argued at Appellate Division	225
Number of appeals argued at Appellate Term	101
Number of appeals argued at General Sessions	100
Number of appeals argued at Court of Appeals	60
Number of hearings before referees or commissioners	8,250
Number of motions argued	2,184
Number of orders entered	4,319
Number of judgments against City	350
Amount of judgments against City	$500,000
Number of judgments in favor of City (not including Personal Tax Cases)	275
Amount of such judgments	$125,000

The amount of judgments against the City during each of the past three years has been less than one-third of the average amount of judgments against the City from the date of Consolidation down to and including 1903.

Collections and Disbursements—For the year 1908 the moneys collected will exceed $800,000. The average amount of collections during the four preceding years was about $220,000. The total appropriations for 1908 were $784,370. The Department, was, therefore, more than self supporting during the year.

Contracts, Etc., Approved—The number of contracts, deeds, leases, releases, etc., approved as to form, was over 4,700.

Opinions—The number of written opinions rendered was over 1,700.

Bureau of Personal Taxes—Seven thousand nine hundred and thirty actions were commenced, and $109,894.79 was collected.

Bureau of Penalties—Over ten thousand violations of Corporation Ordinances were prosecuted.

Tenement House Branch—Fifteen thousand sixty-five violations were received on which over 6,500 actions were brought.

Tax Certiorari Cases—During the year 1908 184 tax certiorari cases were disposed of. The amount of the assessments under review in those cases was $96,059,167; the amount of assessments in litigation $48,785,497. The amount of such assessments sustained was $38,293,030, and the amount vacated $10,492,467. Of these 184 proceedings disposed of, 150 were real estate cases, which included 2,254 separate assessments. Of these real estate assessments 5 were vacated, 103 reduced, and 2,146 sustained.

Special Franchise Tax Cases—Over five hundred cases have been brought against the State Board of Tax Commissioners to review assessments on street railway companies, gas and electric light companies, etc., for special franchises. The City of New York receives the entire amount of the tax collected. The amount of the assessments under review in these proceedings is over *two billion dollars*, and the taxes thereon amount to over *thirty million dollars*. The Department has been successful in the defense of these proceedings and several of the largest corporations have submitted offers of settlement which are now under consideration.

Water Supply Proceedings—Thirty-four separate proceedings to acquire property have been commenced, in 23 of which title has vested in the City. The land thus acquired embraced 10,434 acres.

Street Opening Proceedings—Fifty-six proceedings were terminated by confirmation of reports. Fourteen and a half miles of new

streets were opened. The awards in these proceedings were $4,517,-231.29, and the assessments on property benefited $4,952,942.22.

Other Condemnation Proceedings—Thirteen proceedings were completed in which the City acquired property for dock purposes, bridge approaches, public schools, libraries, baths, etc.

Organization—During the year 1908 the Law Department has been thoroughly reorganized. The legal force has been arranged in divisions comprising a senior assistant, deputy assistants, junior assistants and law clerks. Each division handles one special line of litigation, such as contracts, torts, real estate, etc. Practically all positions in the Department, except those of Assistant, are in the competitive Civil Service. The office force at the close of the year was almost 400, making the office of the Corporation Counsel undoubtedly the largest law office in the world.

CIVIL SERVICE IMPROVEMENTS.

The establishment of the Board of Water Supply, the acquisition of the Staten Island and Thirty-ninth street ferries and the extension of the paid Fire Department into the boroughs of Queens and Richmond have added largely to the work of the Municipal Civil Service Commission. In the year just ended the applications for examination have averaged 5,000 a month. The percentage of absentees from examination is large and uncertain, ranging from 20 to 30 per cent. of the number of applicants. This involves such a large waste of time and money for stationery, postage and the employment of monitors that it may be necessary to adopt a system of fees as a pre-requisite to the filing of applications and as a means of curbing indiscriminate application for examination.

Among the more important changes in the examining department may be noted the holding of examinations for promotion once a year only, avoiding the expense and confusion of holding them when-

ever called for by the various departments; the establishment of a uniform system of efficiency records in all departments of the City government: the requirement that candidates for promotion shall file application for examination; the establishment of a promotion bureau under the responsible charge of a designated examiner; the system of renumbering the papers of candidates to prevent the examiners who rate the papers from knowing the examination numbers; the absolute protection of examination papers unrated and in process of rating; the absolute verification of signatures and statements; the appointment of monitors from the non-competitive class, allowing the employment of advanced students of the higher educational institutions; the refusing consideration of appeals which are not based on a reasonable charge of error, and the obtaining of information, in non-competitive examinations, as to the candidate's fitness instead of relying upon the unverifiable statements of the candidates themselves.

In the payroll division a card index system now shows the entire record of all persons employed in the City service and including all who have been so employed since 1898. This system uses 60,000 cards and covers the results of examinations and the appointments and changes in the service since the first enforcement of the Civil Service Law in 1884. In the past five years the detection of violations of the law and the rules in regard to changes in the service necessitated the deduction of about 25,000 names from the payrolls, but in the last year the number of reductions has decreased materially.

In the Labor Service, where the number of applications are about 25,000 annually, the Commission has eliminated all theoretical questions from its oral and trade-school examinations and the tests are exclusively practical.

The public has come to a better appreciation of the Civil Service Law and its exactions. Schools of instruction have been established

in political headquarters and elsewhere and the opportunities for intelligent study of the qualifications of City employees grow continually. Several of the leading newspapers devote space every day to information in regard to pending examinations.

ARMORIES.

The Armory Board is responsible for the care and maintenance of the quarters of twenty-six military and naval organizations, housed in twenty-three buildings, erected and equipped at a total cost to the City of New York of $14,685,188.26.

During the past five years many alterations and improvements, made necessary by the Dick Bill and the new Military Law, have been made to nineteen of those buildings, and the armories of the Thirteenth, Fourteenth, Twenty-third Regiments and Squadron C, in Brooklyn, and the Ninth and Twelfth Regiments, in Manhattan, have been enlarged.

Four new armories have been erected, equipped and furnished for these organizations:

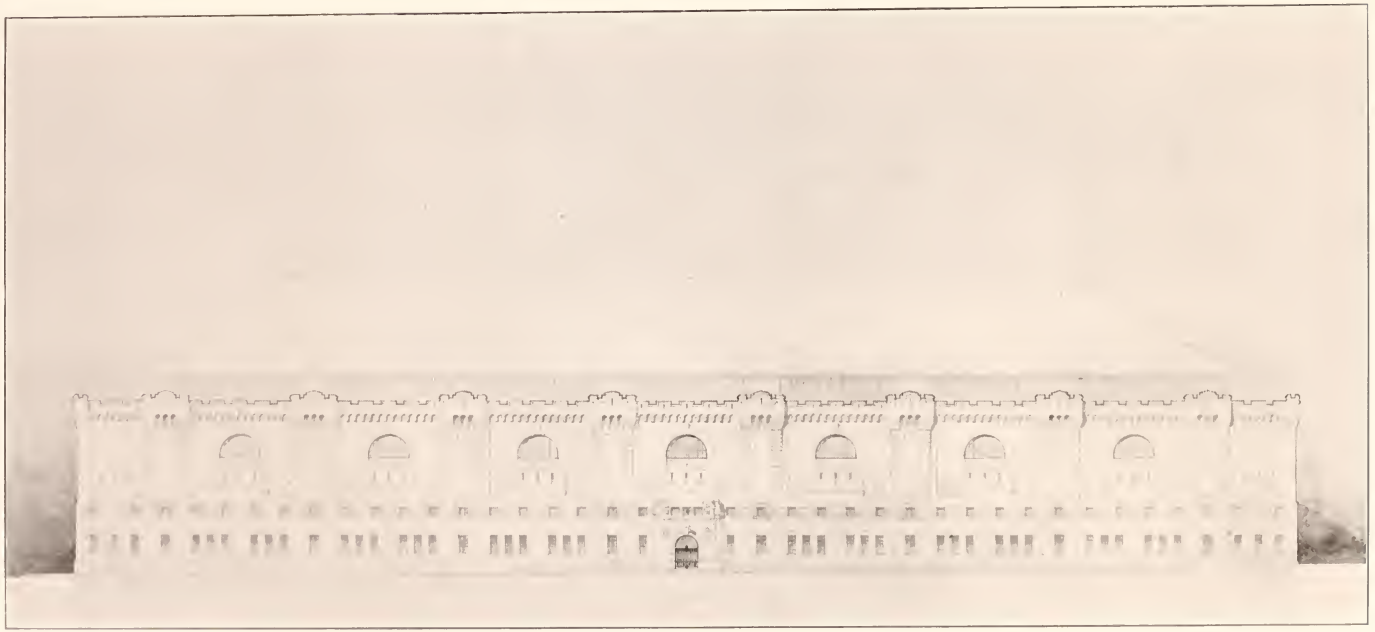
Sixty-ninth Regiment, Twenty-fifth Street and Lexington Avenue, Manhattan, at a cost of.....	$1,539,964.84
Seventy-first Regiment, Thirty-fourth Street and Park Avenue, Manhattan, at a cost of.....	1,194,757.90
Squadron C, Bedford Avenue, President and Union Streets, Brooklyn, at a cost of.....	571,679.09
Second Battalion Naval Militia, First Avenue and Fifty-second Street, Brooklyn, at a cost of.....	582,948.91

In addition to these, a new armory is in process of construction for the Second Battery, at Franklin Avenue and East One Hundred and Sixty-sixth Street, Borough of The Bronx, at a cost of $535,000, and the excavation is completed for an armory to be erected for the Twenty-second Regiment Engineers, at Fort Washington Avenue

ARMORY OF THE SECOND BATTERY, N. G. N. Y.

Franklin Avenue and East One Hundred and Sixty-sixth Street, The Bronx.

C. C. Haight, Architect.



ARMORY OF THE TWENTY-SECOND REGIMENT, ENGINEERS.

Fort Washington Avenue and One Hundred and Sixty-eighth Street.

Walker & Morris, Architects.

BROOKLYN PUBLIC LIBRARY.

To be built at Flatbush Avenue and Eastern Parkway.

R. F. Almirall, Architect.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.

Eastern Parkway and Washington Avenue.

and One Hundred and Sixty-eighth Street, Manhattan, at a cost of about $1,100,000 (including site, building and equipment). The money for this building will be provided by the sale of the present armory of the organization at Sixty-eighth Street and Broadway, for which the Commissioners of the Sinking Fund have refused an offer of approximately $1,150,000.

A long step towards economy in administration has been made by standardizing the supplies and furniture for the various armories, and by the abandonment of obsolete and old-fashioned lighting methods.

PARKS.

New York now has 7,222 acres of parks, or about three and two-fifths per cent. of its 209,218 acres. Of the 1,452 acres in Manhattan, Central Park has 849 acres; of 1,452 acres in Brooklyn, Prospect Park occupies 526 acres; of 3,931 acres in The Bronx, Pelham Bay Park has 1,756 acres, Van Cortlandt Park 1,132 acres, and Bronx Park 719 acres; of 622 acres in Queens, Forest Park has 536, and of 63 acres in Richmond, Silver Lake Park takes up 58 acres. There are 52 miles of parkway in the Greater City.

Of the total park acreage, 253 acres were placed under the jurisdiction of the Park Department during the last five years. These include Chelsea Park, 58 acres added to Bronx Park; Kissena Park, Greenpoint, Amersfort, Highland and McLaughlin parks in the Borough of Brooklyn, and several small unnamed parks as well as desirable additions to parks already existing.

Of the $2,850,608.34 of Corporate Stock properly chargeable to this administration for construction and improvement in the parks of Manhattan and Richmond during the last five years, $1,240,000 went to the building of the extension of the Metropolitan Museum of Art, and $500,000 to the additions to the American Museum of Natural History. Issues of $4,942,000 of Corporate Stock were made neces-

sary by the acts of previous administrations, such as the authorization of $3,650,000 for the New York Public Library Fund.

In the same period of time Corporate Stock of $4,505,602.94 was issued for the parks of Brooklyn and Queens, but $1,875,000 of this went to complete the Shore road.

The generally good condition of the parks at the present time will, I believe, justify to the public whatever sums have been spent in acquiring, improving and maintaining them. Central Park, always a difficult problem from its very size, situation and the demands made upon it, has been brought to excellent condition. Its soil has been replenished as far as economy allowed and the removal of unnecessary tree growth gives opportunity for the survival of the necessary.

Prospect Park, which has required little criticism since the incoming of the present Commissioner, stands as a model of what may be done with a park possessing great natural advantages. In both the parks named the roads have been brought to a state of first-class utility. The proper use of oil has, at a trifling cost, laid the dust, kept the material together and protected the adjoining land.

Much construction has been done in the parks of The Bronx, which have come to be enjoyed by the people of all the boroughs, attracted by the Zoological Park, the golf links and gardens of Van Cortlandt Park, the athletic grounds and bathing beaches of Pelham Bay Park and the innumerable features of the great system.

METROPOLITAN MUSEUM OF ART.

The first section of the new North Wing of the Metropolitan Museum of Art will be opened on January 4 by an exhibition of German contemporary art, sent here by a special commission officially appointed by the German Government. The new Central Wing, to accommodate the Hoentschel Collection and other collections of decorative art, will be finished during the early part of the year.

NEW BOAT HOUSE, PROSPECT PARK.

BIRD HOUSE, ZOOLOGICAL PARK, THE BRONX.

COMFORT STATION, CROTONA PARK.

ELEPHANT HOUSE, ZOOLOGICAL PARK, THE BRONX.

Heins & La Farge, Architects.

SHELTER BUILDING, VAN CORTLANDT PARK.

THE ART COMMISSION.

The annual number of submissions acted upon by the Art Commssion has doubled during the last five years, being 90 in 1904, and 180 in 1908, and the total number of submissions for these five years is 681. These submissions cover objects having a total estimated value of $130,000,000, and include 409 public structures, 138 statues, monuments and busts, 95 ornamental and drinking fountains, 12 portraits and mural decorations and 27 tablets.

In July, 1907, the jurisdiction of the Commission was extended to all structures built on public land. Previous to this amendment structures costing less than $1,000,000 were passed upon by the Commission only when requested to do so by the Mayor. The number of such requests increased rapidly from year to year, for in 1904 the Mayor requested the Commission to act upon 28 structures, in 1905 on 56 structures, in 1906 on 65, and during the first five months of 1907, on 51.

The Charter makes the Art Commission, in a manner, guardian of existing works of art owned by the City, which comprise 425 portraits, sculptural objects and mural decorations. The collection of portraits dates from 1790, but until the investigation by the Art Commission practically nothing was known as to the time and manner of their acquisition, and in many cases the artists were unknown. In 1904 the Art Commission printed a tentative list of the works of art in the Borough of Manhattan. This was followed in 1906 by a similar list of those in the Borough of Brooklyn. The Commission printed the meagre data found on the small tablets on the portraits, without questioning their accuracy, but in 1907 it began a systematic search through the City's records and from them unearthed the facts concerning nearly all the paintings and sculpture. These facts, with a photograph and a brief description of the listed object, have been put on file in the office of the Commission. The Commission has just issued a catalogue of the works of art belonging to the City.

BROOKLYN PUBLIC LIBRARY.

Work on the new central building of the Brooklyn Public Library will be started in about a year. This library will cost $5,000,000 and will be built at the junction of Flatbush Avenue and the Eastern Parkway.

GIFTS TO THE CITY.

Last spring Mrs. Russell Sage, who takes great interest in Central Park, gave to the Park a plantation of hybrid and maximum rhododendrons, including all the soil necessary for the planting, as well as all the labor required in connection with setting the plants. The plantation is on the East Drive, between Ninetieth and One Hundredth Streets, and is the finest exhibition of its kind in the world. This gift, which cost the donor about $60,000, has added to the landscape effect of Central Park an adornment which will last many years.

Mrs. Sage has also volunteered to pay for the restoration of the Governors' Room in the City Hall to its original condition. This work will cost more than $25,000.

All litigation in connection with the bequest of Angelina Crane, under her will dated January 19, 1891, for the erection of a drinking fountain to her memory, has been ended. The Commissioner of Parks for the Boroughs of Manhattan and Richmond has in course of preparation a contract with Frederick MacMonnies for the submission of a suitable design commensurate with the amount of the available fund, about $60,000. When this design is received, it will be submitted to the Art Commission for approval as to design and location in City Hall Park.

The City has recently recovered a legacy of $187,746.84 left to it by the late Betsy Head, to be used for the purchase and improvement of playgrounds.

PUBLIC LIBRARY NO. 6.

One Hundred and Twenty-fifth Street Branch.

McKim, Mead & White, Architects.

PUBLIC LIBRARY NO. 14.

Tompkins Square Branch.

McKim, Mead & White, Architects.

PUBLIC LIBRARY NO. 35.

Hamilton Grange Branch, One Hundred and Forty-fifth Street.

McKim, Mead & White, Architects.

THE INTERNATIONAL ROAD CONGRESS AT PARIS.

Last October the International Road Congress, the purpose of which I outlined in my last message to your Honorable Board, was held at Paris. This Congress, the first of its kind ever organized, was arranged by the French Government, and was prompted by the serious effect of high-speed motor cars upon the highways. Three delegates were sent by the United States Government, and several American states and cities were also represented. The Chief Engineer of the Board of Estimate and Apportionment, Nelson P. Lewis, and the Chief Engineer of the Department of Finance, Chandler Withington, were delegated to represent the City of New York, in the belief that not only would valuable information be secured at the Congress, but that the opportunity to observe the organization and methods under which municipal improvements are planned and carried out in European cities, would be of substantial use to our engineers. This practice of sending technical representatives to other cities and countries is quite generally followed by European cities, with most advantageous results. Mr. Lewis and Mr. Withington have prepared full reports on the Congress. For the following synopsis I am indebted to Mr. Lewis:

The most conspicuous difference between the administration of public works, and especially of highways, in Europe and America, is the centralization of authority and responsibility in the former, and the decentralization, or diffusion of such authority and responsibility, in this country. In general, it may be stated, that greater centralization is accompanied by increased efficiency and economy, although the experience of Switzerland may be considered an exception. In that country the central government assumes no responsibility and exercises no authority over the highways, each canton being responsible for its own roads. In Great Britain the policy of decentralization has

been carried to an absurd extreme, there being in England and Wales some 1,900 separate boards or councils, having jurisdiction over highway maintenance, while it is said that within fifteen miles of Charing Cross, London, there are ninety local road authorities, who act independently of each other. In the City of New York there are separate highway bureaus dealing with the streets and roads in each borough, each independent of the other and each with its own organization, its own methods of administration and its own standards of work. The waste of energy, material and money, and the unsatisfactory results are matters of common knowledge.

The general use of the motor car, with its serious effect upon roads of the old type, is necessitating different treatment and different methods of construction wherever roads of the macadam type are in use. The mileage of such roads in the City of New York is, and will continue to be, large, until our suburban wards have been so fully developed as to permit the laying of permanent pavements. These roads cannot be reconstructed at once, but the dust nuisance can undoubtedly be greatly abated by surface treatment. Sprinkling with oil emulsions and coating with tar or other bituminous material have been successfully employed on European and on some American roads. Similar methods have been used to a very limited extent in this city, but this treatment has not had the serious investigation and the technical study which is required to make it a success, and to avoid the nuisance, discomfort and damage which follows a careless or haphazard application of these materials. If there is a city or a locality which is in conspicuous need of an efficient organization with uniform practice and standards and with distinct responsibility and authority for the administration of its highways, it is the City of New York.

During the progress of the Congress, I am informed by Mr. Lewis, the suggestion I made last year to the Prefect of the Seine

that the Congress increase its scope so as to take in other serious problems of municipal government, was widely discussed by the delegates.

The next Congress takes place in Brussels in 1910 and there is every indication there will be an opportunity for an interchange of views and experiences on all municipal problems.

MUNICIPAL OPERATION.

So far as it has been in my power I have followed the policy declared in the last municipal campaign, that municipal operation of public utilities should be resorted to only when private ownership fails to render satisfactory service. It was this policy which resulted in taking over the Staten Island Ferry and the Thirty-ninth Street Ferry and the private water companies of Staten Island. In operating these ferries at a loss the City is carrying out one of its responsibilities to a part of its people.

In signing the Elsberg Rapid Transit Bill on April 26, 1906, I said:

> "If it should prove that private capital will not be offered under these conditions and that the City, by itself, cannot construct and equip these new roads, it will be perfectly feasible to apply to the next Legislature for a satisfactory amendment to this law. * * * In the meantime the City will have had the advantage of accurately ascertaining just how much it must concede in order to induce responsible persons to invest in its new rapid transit routes."

It seems to me that the time has now come to make such amendments to the Elsberg law as will encourage private capital to extend our transit facilities.

We have the assurance, moreover, under existing law, that the City's interests in such contracts will be safeguarded by a strict accounting system.

In closing, I wish to express my thanks to the Department heads who have served under me and to the members of my office staff.

Respectfully,

Mayor.

APPENDIX

STATEMENT OF CORPORATE STOCK ISSUED

From January 1, 1904, to November 1, 1908,

Showing the Amount Thereof Issued for Purposes to Which the City was Committed Prior to January 1, 1904, and the Amounts Issued for Purposes Authorized Subsequent to Said Date.

For Water.

Additional Water Fund, City of New York.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Sanitary Protection of Croton Watershed	$68,500 00	$68,500 00	.....
Additional Water Fund (Aqueduct Commission)	13,287,063 62	13,287,063 62	.....
Water Fund, Manhattan and The Bronx	6,596,938 37	1,869,800 00	$4,727,138 37
Water Main Fund No. 3	21,000 00	21,000 00	.....
New Water Supply (chapter 724, Laws of 1905)	5,693,500 00	.....	5,693,500 00
High Pressure Water System, Manhattan	3,394,650 00	.....	3,394,650 00
Water Main Fund, Brooklyn	122,100 00	122,100 00	.....
Water Construction, Brooklyn	31,500 00	31,500 00	.....
Water Fund, Brooklyn	7,020,404 64	2,371,000 00	4,649,404 64
High Pressure Water System, Brooklyn	1,414,600 00	.....	1,414,600 00
Water Fund, Queens	874,000 00	505,000 00	369,000 00
Water Fund, Richmond	376,200 00	72,000 00	304,200 00
Examination, etc., as to Present and Future Water Supply of the City	2,498 26	2,498 26	.....
Water Meter Fund (for Purchase of Water Meters)	5,000 00	5,000 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Water Main, from Trotting Course Lane to Myrtle and Cypress Avenues, Queens	22,600 00	.....	22,600 00
Selecting Site for Filter Plant and Preparing Plans and Specifications	50,000 00	.....	50,000 00
Acquisition of Property, Rye Lake, Wampus River and Pond	640,643 37	.....	640,643 37
Land for Pipe Conduits, etc., Brooklyn	3,900 00	.....	3,900 00
Total for Water	$39,625,098 26	$18,355,461 88	$21,269,636 38

For Rapid Transit.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Manhattan and The Bronx	$12,536,722 38	$12,536,722 38	.....
Brooklyn and Manhattan	3,514,500 00	3,514,500 00	.....
Brooklyn Loop Lines in Manhattan	3,389,602 80	.....	$3,389,602 80
Total for Rapid Transit	$19,440,825 18	$16,051,222 38	$3,389,602 80

For Schools.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
High School Fund (old account)	$76,000 00	$76,000 00	.....
School Building Fund, Richmond	80,000 00	80,000 00	.....
School Building Fund, All Boroughs	50,163,430 00	12,538,430 00	$37,625,000 00
College of The City of New York	4,156,500 00	4,156,500 00	.....
Normal College Building, Fire Escapes	5,000 00	.....	5,000 00
Purchase of State Normal and Training School, Jamaica	83,000 00	.....	83,000 00
Boys' High School, Brooklyn	6,000 00	.....	6,000 00
Parental School, Queens	86,500 00	.....	86,500 00
School Buildings, Interior Construction—			
Manhattan	164,822 00	.....	164,822 00
The Bronx	37,000 00	.....	37,000 00
Brooklyn	272,872 00	.....	272,872 00
Queens	69,800 00	.....	69,800 00
Richmond	9,200 00	.....	9,200 00
School Buildings, Construction and Improvements: Contingencies	114,000 00	.....	114,000 00
School Buildings, Construction and Improvements—			
Manhattan	9,000 00	.....	9,000 00
Brooklyn	81,700 00	.....	81,700 00
Queens	7,000 00	.....	7,000 00
School Buildings, Fire Protection—			
Manhattan	96,406 25	.....	96,406 25
The Bronx	7,000 00	.....	7,000 00
Brooklyn	57,000 00	.....	57,000 00
Queens	38,000 00	.....	38,000 00
Richmond	6,000 00	.....	6,000 00
Washington Irving High School, Manhattan	12,000 00	.....	12,000 00
Total for Schools	$55,638,230 25	$16,850,930 00	$38,787,300 25

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
William H. Seward Park in Hester Street	$6,300 00	$6,300 00	.....
Chelsea Park	8,500 00	.....	$8,500 00
Improvement of Claremont Park, on Clay Avenue Side, The Bronx	15,000 00	.....	15,000 00
Improvement of St. James Park, The Bronx	14,500 00	.....	14,500 00
Bath Houses and Shelter House, Orchard Beach, Pelham Bay Park	4,100 00	.....	4,100 00
Improvement of Pelham Bay Park Along Pelham Bay Shore	10,000 00	.....	10,000 00
Improvement of Mosholu Parkway	13,500 00	.....	13,500 00
Improvement of Bronx and Pelham Parkway	52,700 00	.....	52,700 00
Improvement of Spuyten Duyvil Parkway	45,000 00	.....	45,000 00
Construction and Improvement of John Jay Park, DeWitt Clinton Park, Thomas Jefferson Park and Small Park at Thirty-fifth Street and First Avenue	350,000 00	350,000 00	.....
Additional Public Parks Fund	350,000 00	350,000 00	.....
Public Park in Twelfth Ward, One Hundred and Forty-fifth, One Hundred and Fifty-fifth Streets, Bradhurst and Edgecombe Avenues	48 94	48 94	.....
Riverside Park and Drive, Ninety-sixth Street Viaduct	211,428 16	211,428 16	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Riverside Park and Drive, Twelfth Avenue Viaduct, Awards for Damages	220,513 94	220,513 94	.....
Botanical Museum, Herbarium and Garden	441,360 92	141,000 00	300,360 92
Washington Park in Stapleton and Small Park in Richmond, Improvement of	3,095 76	3,095 76	.....
Construction and Maintenance of Public Parkways	10,000 00	10,000 00	.....
Improvement of Parks, Parkways and Drives, Manhattan and Richmond	575,500 00	506,500 00	69,000 00
Restoration and Improvement of Jumel Mansion and Grounds	11,275 00	.....	11,275 00
Improvement of Parks, Parkways and Drives—			
The Bronx	563,000 00	482,000 00	81,000 00
Queens	476,000 00	321,000 00	155,000 00
Toilet Facilities in City Parks and Rebuilding Bank, Rock Bridge, Central Park	23,500 00	23,500 00	.....
Widening and Improving Cathedral Parkway, Between Fifth and Seventh Avenues, Manhattan	63,000 00	.....	63,000 00
New York Zoological Garden in Bronx Park	1,030,870 70	300,000 00	730,870 70
Improvement and Construction of Parks, Parkways, Playgrounds, Boulevards and Driveways, Manhattan and Richmond	1,457,500 00	.....	1,457,500 00
Improvement and Construction of Parks, etc., The Bronx	980,666 66	.....	980,666 66

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Improvement and Construction of Parks, etc., Brooklyn and Queens	1,476,680 00	.....	1,476,680 00
Acquisition and Construction of Playgrounds for the Children of the City	903,000 00	.....	903,000 00
Athletic Fields Under Jurisdiction of Board of Education	305,500 00	.....	305,500 00
Reconstructing Bulkhead on the Speedway	2,000 00	.....	2,000 00
Alterations, etc., in DeWitt Clinton Park	1,000 00	.....	1,000 00
Wire Fence, Bronx Park, at Bronxdale	5,000 00	.....	5,000 00
Department of Parks, Repairing Drives, etc.—			
Manhattan and Richmond	1,000 00	.....	1,000 00
Brooklyn and Queens	54,000 00	.....	54,000 00
The Bronx	23,000 00	.....	23,000 00
Total, Parks, etc	$9,708,540 08	$2,925,386 80	$6,783,153 28

For Public Buildings.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Improving, etc., New County Court House, Manhattan	$50,000 00	.....	$50,000 00
New Hall of Records	3,106,164 94	$3,106,164 94	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Municipal Building, Manhattan Terminal of New York and Brooklyn Bridge, Plans and Specifications	20,000 00	.....	20,000 00
New Hall of Records, Equipping Offices	33,000 00	.....	33,000 00
Criminal Court Building, Manhattan, Completion	56,000 00	56,000 00	.....
Criminal Courts Building, Installing Vacuum Cleaning System	5,000 00	.....	5,000 00
Criminal Courts Building, Completing Electrical Wiring System	9,500 00	9,500 00	.....
Court of General Sessions, Equipping Additional Court Room, etc.	32,500 00	.....	32,500 00
Repairs to County Court House, New York County	50,000 00	.....	50,000 00
Thirteenth District Municipal Court, Manhattan, Acquisition of Property on Madison Street	127,000 00	.....	127,000 00
Repairs and Alterations to Building No. 264 Madison Street, Manhattan, for Use of Thirteenth District Municipal Court	44,000 00	.....	44,000 00
Permanently Bettering Fifty-seventh Street Court House, Jefferson Market Court House and Harlem Court House	12,000 00	.....	12,000 00
Improvement to Brownstone Building, City Hall Park	20,000 00	.....	20,000 00
Improvements, etc., City Hall, Manhattan	45,000 00	.....	45,000 00
Municipal Electric Lighting Plant.	625,000 00	.....	625,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Improving Washington, West Washington, Fulton and Jefferson Markets	16,000 00	.....	16,000 00
West Washington Market, Reconstruction of Buildings Damaged by Fire	26,500 00	.....	26,500 00
Office Building, President of the Borough of The Bronx, Williamsbridge	53,000 00	.....	53,000 00
Construction and Equipment, Court House, The Bronx	175,000 00	175,000 00	.....
Kings County Hall of Records, Metallic Furniture	6,500 00	.....	6,500 00
Kings County Hall of Records, Extension, Alterations, etc	197,700 00	197,700 00	.....
Municipal Court House Site, Brooklyn	1,100 00	.....	1,100 00
New Municipal Building and Additional Court Building, Brooklyn, Construction	13,000 00	13,000 00	.....
Court House on Gates Avenue for Second District Municipal Court and Sixth District Magistrates' Court, Brooklyn	50,000 00	50,000 00	.....
Gates Avenue Court House, Brooklyn, Electric Light and Gas Fixtures	1,500 00	.....	1,500 00
Permanently Bettering Borough Hall, Brooklyn	1,000 00	.....	1,000 00
Permanently Bettering Kings County Court House	7,000 00	.....	7,000 00
Kings County Court House, Coal Vaults, etc	3,350 00	.....	3,350 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Repairs, etc., Men's Prison, Raymond Street Jail, Brooklyn....	20,000 00	.....	20,000 00
Raymond Street Jail, New Building, Plans and Specifications....	7,500 00	.....	7,500 00
Public Comfort Station, Wallabout Market, Brooklyn.....	500 00	.....	500 00
Public Market, Brooklyn, Acquiring Title.....	752,700 00	.....	752,700 00
Public Market, Eighth Ward, Brooklyn, Preparing Land.....	146,500 00	.....	146,500 00
Construction of Borough Hall, Queens	42,347 48	42,347 48	.....
Rebuilding Queens County Court House	280,000 00	.....	280,000 00
Alterations, etc., to Queens County Court House Building, Long Island City.....	39,471 75	.....	39,471 75
Construction of County and Borough Buildings, Queens.....	15,000 00	.....	15,000 00
Queens County Jail, New Fence..	9,700 00	.....	9,700 00
Borough Building, Richmond....	619,700 00	619,700 00	.....
Staten Island Association of Arts and Sciences, Furnishing Quarters in Borough Hall.....	4,000 00	.....	4,000 00
New Richmond County Jail, Construction	105,000 00	105,000 00	.....
Richmond County Court House, Improving, etc.....	3,000 00	.....	3,000 00
Armory Fund.....	3,309,936 12	2,133,422 55	1,176,513 57
American Museum of Natural History	739,000 00	308,000 00	431,000 00
Metropolitan Museum of Art.....	759,400 00	20,000 00	739,400 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Museum of Arts and Sciences, Brooklyn, Addition	666,700 00	666,700 00	.....
Aquarium Building, Battery	64,500 00	30,000 00	34,500 00
Public Bath, Rivington Street	22,500 00	1,700 00	20,800 00
Public Baths, Manhattan	1,357,567 50	811,500 00	546,067 50
Public Baths, The Bronx	125,000 00	125,000 00	.....
Heating Equipment, Building at One Hundred and Sixty-seventh Street, Brook and Washington Avenues, The Bronx	960 00	.....	960 00
Public Baths, Brooklyn	449,000 00	267,600 00	181,400 00
Public Bath, Eighth Street, First Ward, Queens	3,500 00	.....	3,500 00
Interior Public Baths, Long Island City	550 00	.....	550 00
Floating Bath, Long Island City	15,000 00	.....	15,000 00
Gouverneur Hospital	350,500 00	350,500 00	.....
New Bellevue Hospital	1,152,100 00	1,152,100 00	.....
Temporary Pavilions, Bellevue Hospital	15,000 00	.....	15,000 00
Alterations to Buildings and Fire Protection Devices, Bellevue Hospital	19,800 00	.....	19,800 00
Bellevue Hospital Training School for Women Nurses	687,500 00	.....	687,500 00
New Bellevue Hospital, Acquiring Property	1,622,666 90	1,622,666 90	.....
Dormitory, Medical College Building, Manhattan	3,000 00	3,000 00	.....
New Harlem Hospital	770,000 00	770,000 00	.....
Fordham Hospital	741,750 00	741,750 00	.....
Cumberland Street Hospital, Brooklyn, Alterations	21,000 00	.....	21,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Reception Hospital for Insane, Site, Manhattan	145,000 00	.....	145,000 00
Department of Correction, Building Fund	295,000 00	35,000 00	260,000 00
Penitentiary on Rikers Island	43,500 00	.....	43,500 00
Department of Charities—			
Building Fund	1,999,800 00	489,500 00	1,510,300 00
Lodging House, Manhattan	20,000 00	.....	20,000 00
Staff House, Metropolitan Hospital, Blackwells Island	2,000 00	.....	2,000 00
Tuberculosis Infirmary, Metropolitan Hospital, Blackwells Island	4,500 00	.....	4,500 00
Morgue, Metropolitan Hospital	1,500 00	.....	1,500 00
Hospital Pavilion, City Home, Blackwells Island	9,000 00	.....	9,000 00
Nurses' Home, Children's Hospital, Randalls Island	3,000 00	.....	3,000 00
Nurses' Home and Training School, Kings County Hospital	6,500 00	.....	6,500 00
Acquiring Land for Coney Island Hospital	127,662 00	.....	127,662 00
Additional Dormitories, City Colony, Richmond	3,000 00	.....	3,000 00
Pavilion for Insane, City Colony, Richmond	500 00	.....	500 00
Steam Heating and Lighting Plant, Kings County Hospital	2,500 00	2,500 00	.....
New York Public Library	3,487,400 00	3,487,400 00	.....
Central Library Building, Brooklyn	18,825 82	.....	18,825 82

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Enlarging Site, Montague Street Branch Brooklyn Public Library	30,000 00	30,000 00	.....
Sites for Carnegie Libraries.....	1,343,000 00	1,343,000 00	.....
City Court Building, City Hall Park, Additional Stories.....	27,000 00	.....	27,000 00
Kings County Court House, Construction of Additional Stories..	11,000 00	.....	11,000 00
Municipal Court House Site, Brooklyn	93 75	.....	93 75
Department of Public Charities, Metropolitan Hospital, New Dormitory	2,474 02	.....	2,474 02
Total for Public Buildings	$27,312,420 28	$18,765,751 87	$8,546,668 41

For Bridges.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Brooklyn Bridge, Gore of Land at Southeast Corner of William Street and Present Property of Bridge	$1,800 00	.....	$1,800 00
Brooklyn Bridge Station, Sands and Washington Streets, Removing Supporting Columns.....	9,000 00	.....	9,000 00
Brooklyn Bridge, Reconstructing Manhattan Terminal.....	380,500 00	$380,500 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Brooklyn Bridge, Acquisition of Property for Manhattan Terminal	1,747,492 50	1,747,492 50	.....
Brooklyn Bridge, Reconstructing Railway Floor	30,000 00	.....	30,000 00
Brooklyn Bridge, Constructing Trolley Railway Approaches, Brooklyn	99,000 00	.....	99,000 00
Brooklyn Bridge, Track Stringers, Safety Signals and Track Loop	37,655 14	.....	37,655 14
Williamsburg Bridge	9,762,500 00	9,762,500 00	.....
Manhattan Bridge	11,333,500 00	11,333,500 00	.....
Queensboro Bridge (Blackwells Island)	10,075,500 00	10,075,500 00	.....
Bridge Over Harlem River, First and Willis Avenues	222,827 04	222,827 04	.....
Bridge Over Harlem River, at Third Avenue	270,740 59	270,740 59	.....
Bridge Over Harlem River, at Madison Avenue	960,876 45	960,876 45	.....
Bridge Over Harlem River, from One Hundred and Forty-fifth to One Hundred and Forty-ninth Street	1,037,505 05	1,037,505 05	.....
Bridge Over Harlem River, from Two Hundred and Seventh to One Hundred and Eighty-fourth Street	1,155,980 54	1,155,980 54	.....
Bridge Across Spuyten Duyvil Creek (Henry Hudson Memorial Bridge)	79,500 00	.....	79,500 00
Bridge Over Tracks of Harlem Railroad at One Hundred and Fifty-third Street, The Bronx	20,000 00	20,000 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Widening Bridge Over Harlem Railroad at One Hundred and Sixty-first and One Hundred and Seventy-seventh Streets, The Bronx	67,000 00	.....	67,000 00
Bridge to Carry Jerome Avenue Over Mosholu Parkway, The Bronx	3,000 00	.....	3,000 00
Extension of Bridge Over Port Morris Branch Railroad at Elton Avenue, One Hundred and Sixty-seventh Street and Washington Avenue, The Bronx	25,000 00	.....	25,000 00
Bridge Over Tracks of Harlem Railroad and Port Morris Branch Thereof, Connecting Melrose Avenue from One Hundred and Sixty-third to One Hundred and Sixty-fifth Street	500 00	500 00	.....
Bridge Over Harlem Railroad and Bronx River at Two Hundred and Twenty-second Street	12,500 00	.....	12,500 00
Bridges in Connection with Depression of Port Morris Branch Railroad	184,000 00	184,000 00	.....
Bridge Over Tracks of New Haven Railroad at Westchester Avenue	30,000 00	30,000 00	.....
Temporary Bridge Over Bronx River at Westchester Avenue	1,000 00	1,000 00	.....
Permanent Bridge Over Bronx River at Westchester Avenue	286,948 72	286,948 72	.....
Bridge Over Bronx River at One Hundred and Seventy-seventh Street	28,000 00	28,000 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Bridge Across Bronx River and Approaches to Bridge Over Harlem Railroad at Two Hundred and Thirty-third Street	169,500 00	169,500 00	.....
Highway Bridge Over Bronx River, from Becker to Wakefield Avenue	1,000 00	.....	1,000 00
Bridge to Extend One Hundred and Eighty-ninth Street Over Harlem Railroad	16,000 00	16,000 00	.....
Approaches to Bridges Over New York Central Railroad and New York and Putnam Railroad at Depot Place and West One Hundred and Seventy-seventh Street.	135,000 00	135,000 00	.....
Bridge Over Eastchester Bay in Pelham Bay Park	476,500 00	476,500 00	.....
Bridge to Replace Eastchester Bridge Over Hutchinson's River	9,417 23	.....	9,417 23
Bridge Over Gowanus Canal at Hamilton Avenue, Union Street, Third Street and Ninth Street, Construction	455,000 00	455,000 00	.....
Bridge Over Gowanus Canal (as Above)—			
Damages, Change of Grade	268,544 65	268,544 65	.....
Damages, Change of Grade	89,306 36	89,306 36	.....
Bridge Across Prospect Avenue at Seeley Street, Brooklyn	16,017 50	16,017 50	.....
Reconstructing Floor, Bridge Over Wallabout Canal, Washington Avenue	6,000 00	.....	6,000 00
Newtown Creek Bridge at Vernon Avenue	957,071 77	957,071 77	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Bridge Over Flushing Creek, Between Jackson Avenue and Broadway	355,000 00	355,000 00	.....
Bridge Across Dutch Kills Creek on Line of Borden Avenue, Queens	133,500 00	.....	133,500 00
Total for Bridges.....	$40,950,183 54	$40,435,811 17	$514,372 37

For Public Works, Streets and Roads.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Broadway Parkways, Fifty-ninth to Manhattan Street, Iron Fences	$1,000 00	.....	$1,000 00
Delancey Street, Bowery and Norfolk Street, Improvement of Roadway	23,200 00	.....	23,200 00
Park Avenue Improvement, Forty-fifth to Fifty-sixth Street.....	120,000 00	$120,000 00	.....
Seventh Avenue Improvement, One Hundred and Tenth to One Hundred and Fifty-third Street....	239,000 00	.....	239,000 00
Broadway Improvements, One Hundred and Thirty-fifth to One Hundred and Sixty-ninth Street.	38,000 00	.....	38,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Extension of Riverside Drive to Boulevard Lafayette	3,536,871 03	3,536,871 03	.....
Riverside Drive Extension and Improvement, from One Hundred and Fifty-eighth Street to Henry Hudson Memorial Viaduct, Plans, etc	37,000 00	.....	37,000 00
Riverside Drive, Construction of Extension North of One Hundred and Fifty-fifth Street to Henry Hudson Memorial Viaduct	58,000 00	.....	58,000 00
Repairing Retaining Wall, West Side of Boulevard Lafayette, Near One Hundred and Eighty-first Street	10,000 00	.....	10,000 00
Rebuilding Retaining Wall, West Side of Fort Washington Avenue	11,000 00	.....	11,000 00
Street Signs, Manhattan	30,000 00	.....	30,000 00
Park Avenue Improvement, Above One Hundred and Sixth Street	621 08	.....	621 08
Sodding Plots, Prospect Avenue, The Bronx	5,000 00	.....	5,000 00
Sodding Plots, Longwood Avenue, The Bronx	1,000 00	.....	1,000 00
Change of Grade Damage Commission, Twenty-third and Twenty-fourth Wards	401,500 00	401,500 00	.....
Change of Grade Crossing at Broadway, New York Central Railroad	9,720 51	.....	9,720 51
Transverse Roads at Tremont Avenue, Burnside Avenue and Kingsbridge Road, in Connection with Grand Boulevard and Concourse	256,200 00	256,200 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Transverse Roads at East One Hundred and Sixty-fifth Street, East One Hundred and Sixty-seventh Street, Burnside Avenue and East Two Hundred and Fourth Street, in Connection with Grand Boulevard and Concourse	35,000 00	35,000 00	.....
Damages to Property on One Hundred and Seventy-seventh Street, Abolishing Grade Crossings, etc.	92,012 50	92,012 50	.....
Fund for Payment of Assessments Imposed Against City	1,000,000 00	1,000,000 00	.....
Relaying Water Main in Southern Boulevard, Near One Hundred and Forty-first Street	13,650 00	13,650 00	.....
Macadamizing Crotona Avenue in Crotona Park	25,000 00	25,000 00	.....
Improvement of Steps at One Hundred and Sixty-sixth Street, Between Fulton and Franklin Avenues, The Bronx	7,600 00	.....	7,600 00
Acquiring Right of Way for New Route of Spuyten Duyvil and Port Morris Railroad	551,025 00	551,025 00	.....
Rebuilding Retaining Wall, East Side of Edgecombe Avenue, One Hundred and Forty-seventh to One Hundred and Forty-eighth Street	20,500 00	.....	20,500 00
Depot Place, The Bronx, Abolishing Grade Crossings, Awards for Damages	8,544 00	8,544 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Palisade Avenue, The Bronx, Damages, Change of Grade	51,207 75	.....	51,207 75
Atlantic Avenue Improvement, Brooklyn	424,500 00	424,500 00	.....
Street Signs, Brooklyn	5,000 00	.....	5,000 00
Shore Road, Brooklyn, Completion of	101,500 00	.....	101,500 00
Abolishing Grade Crossings, Highways and Railroads in Brooklyn	1,250,000 00	1,250,000 00	.....
Paving Farmers' Square, Wallabout Market	4,000 00	.....	4,000 00
Opening, Improving, etc., Bedford Avenue, Brooklyn	325,469 64	325,469 64	.....
Repaving Under Chapter 475, Laws of 1895	10,000 00	10,000 00	.....
Paving Jerome Avenue	4,000 00	4,000 00	.....
Repaving Eighty-sixth Street	32,500 00	32,500 00	.....
Repaving Streets, Manhattan	5,554,850 00	1,913,000 00	3,641,850 00
Repaving Streets, The Bronx	1,464,800 00	414,800 00	1,050,000 00
Deficiencies, in Assessments, Town of New Lots, Brooklyn	36,120 21	36,120 21	.....
Repaving Streets, Brooklyn	7,359,000 00	2,160,000 00	5,199,000 00
Repaving Streets, Queens	1,645,200 00	310,000 00	1,335,200 00
Repaving Streets, Richmond	1,399,000 00	161,000 00	1,238,000 00
Fund for Street and Park Openings	19,932,634 37	12,381,345 09	7,551,289 28
Belmont Avenue Sewer, Extension of, etc., The Bronx	10,500 00	.....	10,500 00
Approving Sewerage System, The Bronx	35,000 00	.....	35,000 00
Approving Sewerage System, The Bronx	30,000 00	.....	30,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Drainage and Sewer District Plans, The Bronx	47,110 00	.....	47,110 00
Sewer in Forty-second Street and Hudson River, Manhattan	36,000 00	.....	36,000 00
Sewer in Park Avenue, South of One Hundred and Fifty-third Street, The Bronx	18,500 00	.....	18,500 00
Reconstructing, etc., Sewer in East One Hundred and Sixty-ninth Street	28,600 00	.....	28,600 00
Reconstruction of Sewers, Manhattan	269,000 00	.....	269,000 00
Construction of Webster Avenue Relief Sewer, The Bronx	497,500 00	.....	497,500 00
Rebuilding Sewer in East One Hundred and Forty-ninth Street, The Bronx	75,000 00	.....	75,000 00
Sewer in Kent Avenue and Division Street, Outlet, Brooklyn	11,000 00	.....	11,000 00
Construction of Sewers, Borough of Brooklyn	803,500 00	300,000 00	503,500 00
Paving, etc., Bridges Over Harlem River Branch of New Haven Railroad, The Bronx	3,000 00	.....	3,000 00
Total for Public Works, Streets and Roads	$47,993,936 09	$25,762,537 47	$22,233,398 62

For Department of Health.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Health Department Building Fund	$1,879,500 00	$1,085,000 00	$794,500 00
Steamboat for Transportation of Patients Affected with Contagious Diseases, etc	67,000 00	.....	67,000 00
Site and Building for Sanitarium for Tubercular Patients, Orange County	318,500 00	.....	318,500 00
Total, Health Department	$2,265,000 00	$1,085,000 00	$1,180,000 00

For Fire Department.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
New Hose, Wagons, etc	$106,150 00	.....	$106,150 00
Fire Alarm Telegraph System, Manhattan	25,000 00	.....	25,000 00
For Sites, Buildings and Telegraph System	1,210,000 00	$500,000 00	710,000 00
For Sites and Buildings	1,188,700 00	.....	1,188,700 00
Sites and Buildings, Manhattan and The Bronx	19,000 00	.....	19,000 00
New Apparatus, Manhattan and The Bronx	95,500 00	.....	95,500 00
Purchase of New Apparatus, Brooklyn	3,000 00	.....	3,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Sites and Buildings, Brooklyn and Queens	210,500 00	210,500 00	.....
Fire Alarm Telegraph System, Queens	62,600 00	.....	62,600 00
Extension of Fire Alarm System, Queens, Including Apparatus for Volunteer Companies	64,000 00	.....	64,000 00
Construction of New Fireboat	8,500 00	.....	8,500 00
Construction, etc., of Fireboats	325,000 00	.....	325,000 00
Placing Fireboat "Seth Low" in Condition for Service	22,500 00	.....	22,500 00
Fire Alarm Telegraph System, Richmond	23,500 00	.....	23,500 00
Boroughs of Brooklyn and Queens, Sites, Erection of, etc., Additions to Buildings for an Extension of Paid System	155,500 00	.....	155,500 00
Total, Fire Department	$3,519,450 00	$710,500 00	$2,808,950 00

For Docks and Ferries.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Dock Fund	$41,404,422 00	$5,614,689 93	$35,789,732 07
Total, Docks and Ferries.	$41,404,422 00	$5,614,689 93	$35,789,732 07

FOR DEPARTMENT OF CORRECTION.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Permanently Bettering and Improving Harts Island and the Buildings Thereon	$40,000 00	.....	$40,000 00
New Boilers, Second District Prison	3,500 00	.....	3,500 00
Repairing Steamboats	30,000 00	.....	30,000 00
Purchase of a New Steamboat	600 00	.....	600 00
Construction and Equipment of Steamboat	3,000 00	.....	3,000 00
Total, Department of Correction	$77,100 00	.....	$77,100 00

FOR DEPARTMENT OF PUBLIC CHARITIES.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
New Steamboat	$65,500 00	.....	$65,500 00
Repairs to Steamboat "Thomas S. Brennan"	22,400 00	.....	22,400 00
Total, Department of Public Charities	$87,900 00	.....	$87,900 00

For Police Department.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
For Sites and Buildings.....	$2,046,920 00	$558,720 00	$1,488,200 00
For Improving, etc., Station Houses	61,000 00	.....	61,000 00
General Repairs, etc., to Steamboat "Patrol"	20,000 00	.....	20,000 00
Two Additional Power Launches..	13,000 00	.....	13,000 00
Total, Police Department	$2,140,920 00	$558,720 00	$1,582,200 00

For Street Cleaning.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
New Stock or Plant, Manhattan and The Bronx.....	$814,595 00	$193,245 00	$621,350 00
Property for Stable, Northwest Corner of Eightieth Street and Avenue B, Manhattan.....	71,000 00	.....	71,000 00
Property on East One Hundred and Eighty-ninth Street, The Bronx	53,500 00	.....	53,500 00
Incinerating Plant, Manhattan....	30,000 00	30,000 00	.....
New Stock or Plant, Brooklyn....	353,000 00	83,750 00	269,250 00
Site for and Construction of Stable, Brooklyn	296,500 00	296,500 00	.....
Two Automobiles.....	4,000 00	4,000 00	.....

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Three or More Autos	11,650 00	.....	11,650 00
New Stock or Plant, Queens	33,503 92	33,503 92	.....
Crematory, Queens	11,550 00	.....	11,550 00
New Stock or Plant, Richmond	179,634 00	101,634 00	78,000 00
Total, Street Cleaning	$1,858,932 92	$742,632 92	$1,116,300 00

For Miscellaneous Purposes.

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Expenses of Commissioners of Estimate and Appraisal	$11,000 00	$9,000 00	$5,000 00
Metropolitan Sewerage Commission	20,000 00	.....	20,000 00
Expense of Commission on Improvements, etc., Jamaica Bay	25,000 00	.....	25,000 00
Comfort Station, Madison Square Park, Manhattan	1,000 00	.....	1,000 00
Public Comfort Stations—			
Manhattan	215,000 00	215,000 00	.....
Brooklyn	43,000 00	43,000 00	.....
Queens	1,000 00	.....	1,000 00
To Provide for Uncollected Taxes	3,000,000 00	3,000,000 00	.....
Storage Yard, Park Avenue and One Hundred and Eightieth Street, etc., The Bronx	169,500 00	.....	169,500 00
Garage Under Brooklyn Bridge	1,000 00	.....	1,000 00

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Improving Sanitary Conditions, Gowanus Canal, Brooklyn	654,000 00	.....	654,000 00
Monument in Memory of Prison Ship Martyrs	46,272 15	.....	46,272 15
Municipal Asphalt Repair Plant, Brooklyn	25,000 00	.....	25,000 00
Alterations, etc., Rooms Leased for Eighth District Court, Westchester, The Bronx	4,000 00	.....	4,000 00
Topographical Bureau—			
The Bronx	251,000 00	.....	251,000 00
Brooklyn	30,000 00	.....	30,000 00
Queens	850,000 00	.....	850,000 00
Richmond	504,000 00	.....	504,000 00
Map or Plan of Portion of Second, Third and Fourth Wards, Queens	100,000 00	.....	100,000 00
Map or Plan of Ward 1, and Parts of Wards 2, 3, 4, 5, Richmond	75,000 00	.....	75,000 00
Carnegie Libraries, Original Stock of Books—			
Manhattan, The Bronx and Richmond	99,257 89	99,257 89	.....
Brooklyn	27,200 00	27,200 00	.....
Queens	18,500 00	18,500 00	.....
Acquisition of Property in Connection with Depressing Tracks of Port Morris Railroad Through St. Mary's Park, The Bronx	60,000 00	60,000 00	.....
Corporation Yard for Bureau of Sewers, Brooklyn	7,100 00	.....	7,100 00
Total for Miscellaneous Purposes	$6,240,830 04	$3,471,957 89	$2,768,872 15

	Total.	Commitments.	
		Prior to January 1, 1904.	Subsequent to January 1, 1904.
Water	$39,625,098 26	$18,355,461 88	$21,269,636 38
Rapid Transit	19,440,825 18	16,051,222 38	3,389,602 80
Schools	55,638,230 25	16,850,930 00	38,787,300 25
City Parks, Public Places, etc.	9,708,540 08	2,925,386 80	6,783,153 28
Public Buildings	27,312,420 28	18,765,751 87	8,546,668 41
Bridges	40,950,183 54	40,435,811 17	514,372 37
Public Works, Streets and Roads	47,995,936 09	25,762,537 47	22,233,398 62
Department of Health	2,265,000 00	1,085,000 00	1,180,000 00
Fire Department	3,519,450 00	710,500 00	2,808,950 00
Docks and Ferries	41,404,422 00	5,614,689 93	35,789,732 07
Department of Correction	77,100 00	.....	77,100 00
Department of Public Charities	87,900 00	.....	87,900 00
Police Department	2,140,920 00	558,720 00	1,582,200 00
Street Cleaning	1,858,932 92	742,632 92	1,116,300 00
Miscellaneous Purposes	6,240,830 04	3,471,957 89	2,768,872 15
Total	$298,265,788 64	$151,330,602 31	$146,935,186 33

Note—The actual issue of Corporate Stock from January 1, 1904, to November 1, 1908, was $298,945,094.84.

Comparison of Budget of The City of New York for 1904 With the Budget for 1909.

		Budget, 1904.	Budget, 1909.	Increase, Budget of 1909 Over 1904.	Decrease, Budget of 1909 Below 1904.	Per Cent. of $15,483,644.07, Being Increase of 1909 Over 1904.
1	Debt Service (principal, interest and installments)	$29,711,290 04	$47,223,078 33	$17,511,788 29	.....	38.501
2	Department of Education	20,913,017 77	27,470,736 80	6,557,719 03	.....	14.417
3	Police Department	12,030,500 00	14,160,201 85	2,129,701 85	.....	4.682
4	Fire Department	5,968,300 28	8,039,565 50	2,071,265 22	.....	4.553
5	Department of Street Cleaning	5,447,712 20	7,418,299 20	1,970,587 00	.....	4.332
6	Charitable Institutions	2,846,249 55	4,760,650 98	1,914,401 43	.....	4.209
7	Department of Water Supply, Gas and Electricity	4,799,852 23	6,511,143 26	1,711,291 03	.....	3.762
8	Department of Health	1,109,391 48	2,484,859 25	1,375,467 77	.....	3.024
9	Department of Parks	1,999,333 95	3,319,065 14	1,319,731 19	.....	2.910
10	President, Borough of Brooklyn	1,409,435 25	2,337,421 44	927,986 19	.....	2.042
11	President, Borough of Manhattan	1,897,645 50	2,697,868 62	800,223 12	.....	1.759
12	Board of City Record	667,300 00	1,441,550 00	774,250 00	.....	1.702
13	Rents	332,095 07	942,342 25	610,247 18	.....	1.341
14	Department of Public Charities	1,902,490 16	2,512,605 66	610,115 50	.....	1.340
15	Libraries	519,393 80	1,101,268 00	581,874 20	.....	1.279
16	Department of Finance	988,030 60	1,545,040 00	557,009 40	.....	1.224
17	Bellevue and Allied Hospitals	598,880 78	1,102,745 02	503,864 24	.....	1.107
18	Department of Correction	794,350 00	1,274,957 50	480,607 50	.....	1.056
19	President, Borough of Queens	869,308 63	1,327,307 18	457,998 55	.....	1.006
20	Municipal Courts, City of New York	430,050 00	849,550 00	419,500 00	.....	.922
21	Law Department	460,560 00	879,340 00	418,780 00	.....	.920

		Budget, 1904.	Budget, 1909.	Increase, Budget of 1909 Over 1904.	Decrease, Budget of 1909 Below 1904.	Per Cent. of $45,483,644.07, Being Increase of 1909 Over 1904.
22	Department of Bridges	423,038 38	790,808 64	367,770 26	.....	.808
23	President, Borough of Richmond	432,980 00	776,069 60	343,089 60	.....	.754
24	Tenement House Department	516,433 08	812,720 00	296,286 92	.....	.651
25	College of The City of New York	298,362 00	584,811 29	286,449 29	.....	.629
26	President, Borough of The Bronx	1,102,000 00	1,289,928 88	187,928 88	.....	.413
27	City Magistrates' Court, First Division	189,400 00	355,800 00	166,400 00	.....	.365
28	City Magistrates' Court, Second Division	177,800 00	328,000 00	150,200 00	.....	.330
29	The Normal College of The City of New York	220,000 00	352,990 00	132,990 00	.....	.292
30	Department of Taxes and Assessments	349,900 00	470,900 00	121,000 00	.....	.266
31	Board of Aldermen and City Clerk	154,456 00	261,806 00	107,350 00	.....	.236
32	City Court of New York	136,050 00	233,400 00	97,350 00	.....	.214
33	Commissioners of Accounts	150,500 00	230,110 00	79,610 00	.....	.175
34	Board of Elections	979,210 00	1,035,130 00	55,920 00	.....	.123
35	Mayoralty	63,500 00	119,300 00	55,800 00	.....	.122
36	Civil Service Commission	100,000 00	153,020 00	53,020 00	.....	.116
37	Board of Assessors	30,450 00	44,500 00	14,050 00	.....	.030
38	Court of Special Sessions, First Division	96,150 00	108,170 00	12,020 00	.....	.026
39	Coroners	151,300 00	159,700 00	8,400 00	.....	.018
40	Court of Special Sessions, Second Division	70,900 00	76,400 00	5,500 00	.....	.012
41	Armory Board	107,807 50	109,950 00	2,142 50	.....	.004
42	Examining Board of Plumbers	5,154 00	6,259 00	1,105 00	.....	.002
43	Children's Court, First Division	.....	26,250 00	*26,250 00	.....	.057
44	Children's Court, Second Division	.....	18,400 00	*18,400 00	.....	.040
45	Detailed Police	.....	26,700 00	*26,700 00	.....	.058
46	Commissioner of Licenses	.....	54,800 00	†54,800 00	.....	.124

		Budget, 1904.	Budget, 1909.	Increase, Budget of 1909 Over 1904.	Decrease, Budget of 1909 Below 1904.	Per Cent. of $45,483,644.07, Being Increase of 1909 Over 1904.
47	Board of Estimate and Apportionment	.....	135,000 00	†135,000 00	.....	.296
48	Brooklyn Disciplinary Training School	.....	60,000 00	†60,000 00	.....	.130
						102.38+
49	State Taxes	556,542 03	.....	.....	$556,542 03	
50	Miscellaneous	956,140 48	426,385 44	.....	529,755 04	2.38—
	Total, City	$102,963,260 76	$148,446,904 83	$46,569,941 14	$1,086,297 07	100.00
	The County of New York	$2,566,090 98	$3,131,886 34	$565,795 36		
	The County of Kings	1,148,003 55	1,634,460 74	486,457 19		
	The County of Queens	159,998 39	305,099 46	145,101 07		
	The County of Richmond	67,672 60	104,349 69	36,677 09		
	Total, Counties	$3,941,765 52	$5,175,796 23	$1,234,030 71		
	Total City Budget	$102,963,260 76	$148,446,904 83	$45,483,644 07		
	Total County Budgets	3,941,765 52	5,175,796 23	1,234,030 71		
	Item of Deficiency in Taxes	1,687,667 20	2,922,447 08	1,234,779 88		
	Total, Budgets	$108,592,693 48	$156,545,148 14	$47,952,454 66		

* Not in 1904 Budget.
† Not in 1904 Budget as separate accounts. Included in "Miscellaneous" in 1904.
Notes—Items 43, 44 and 46 created since 1904. Item 45 included in departmental allowance in 1904. Items 47 and 48 included in miscellaneous items in 1904. Item 49, State Taxes, included in the several county budgets in 1909 and principal cause of increases shown therein.